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McMurtrie

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Lexicon Scientiarum.

C. S. West.

DICTIONARY OF TERMS

USED IN

THE VARIOUS BRANCHES

OF

ANATOMY,
ASTRONOMY,
BOTANY,
GEOLOGY,
GEOMETRY,
HYGIENE,
MINERALOGY,
NAT. PHILOSOPHY,
PHYSIOLOGY,
ZOOLOGY, &c.

FOR THE USE OF ALL WHO READ OR STUDY IN COLLEGE, SCHOOL, OR PRIVATE LIFE.

Μεγα βιβλιον μεγα κακον.

BY

HENRY McMURTRIE, M.D., ETC.

PROFESSOR OF ANATOMY, PHYSIOLOGY, AND NATURAL HISTORY,
IN THE CENTRAL HIGH SCHOOL OF PHILADELPHIA.

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REMARKS.

THE necessity for a scientific glossary has, for some years, been daily experienced by the author of the following pages, and if any apology for the production of "another book" be deemed requisite, that of necessity is surely the most satisfactory.

The urgency of this *want* has been gradually augmenting with the regularly increasing number of the pupils of the institution with which he has the honour of being connected. Whilst that number did not exceed one hundred, the difficulty, although experienced, was not absolutely insurmountable; but now, that it has extended to more than five hundred, its demands for a remedy have become imperative.

That the sciences can neither be taught nor studied without a nomenclature, is an aphorism, of which the truth is as evident as the conclusion to which it leads is undeniable.

Every well-digested course of instruction in any one of the various branches of the Natural Sciences, strictly so called, necessarily includes a continual reference to those laws revealed to us by general Physics. Hence arises an unavoidable accumulation of *terms*, which, without some such aid as this, at once impairs the usefulness of the teacher by rendering his instruction incomplete. In fact, it impales him on the horns of a dilemma, for he must every minute cut short his reasonings, and demonstrations, to explain to the pupil the meaning of the words he is compelled to employ, and thus, not be able to get through his subject in the requisite time, or he must proceed without stopping to explain them, although conscious that they are not understood by his class.

Having, as already stated, experienced the difficulty for some years, the idea of a Scientific Lexicon, to which the pupil could refer at his *leisure*, not merely for the meaning and etymology of terms, but for their orthography, presented itself. But where was it to be found? That glossaries, usually very imperfect, accompany some of the various, insulated, and elementary works on the different sciences is true, although this is by no means the case generally, but no one book, so far as could be ascertained, combined the terminology of the whole—certain ponderous and expensive series of volumes excepted, the bulk and cost of which rendered their adoption impracticable.

Thus situated, no other alternative presented itself than that of a new Lexicon, constructed on such a plan as would combine the terms usually employed in all the sciences, to the utter exclusion of ordinary words. From a rigid adherence to this rule, two important results have been obtained—a small, portable book, and an economy of money.

In order to carry out this principle more effectually, many ordinary words, which, although forming part of a terminology, still retain their usual meaning, are here omitted, and for the same reason generic, anatomical, and other terms, once given, are but seldom repeated.

The etymology of every term invariably accompanies it, first in the characters of the language of the root, and then in the Italic letter, so that the book may be used by the classical student without any reference to its scientific nature, and simply as an etymological exercise which will have the additional advantage of preparing him more completely for the laboratory and lecture-room.

The subject of *genera*, or generic names of animals, plants, and minerals, presented difficulties readily understood by the naturalist, of which, however, it is necessary to allude to but one here, that is their number. To have included them all, would have been to destroy the leading features of the book, its portability and cheapness; to have omitted them all, would have been inconsistent with its design. Upon a careful consideration of all the circumstances, a *mezza via*, or middle course, was adopted, which, whilst it allowed the introduction of some of most interest and importance, excluded others that seemed less worthy of notice—an omission of less consequence, as many even of these are included under the names of the natural orders, families, &c., of which they are the type.

As the elements of the sciences now form a prominent feature in the course of studies in the higher order of schools for girls, as well as for boys, the greatest care has been taken to avoid infringing upon that native delicacy which is the charm of the sex, and which one aim of all education should be to confirm and not to destroy.

Although intended chiefly for teachers and their pupils, or students strictly so called, the Lexicon (it is believed) will prove not less useful to the general reader than to them; for, such is the constant reference to scientific facts expressed in scientific terms by writers of all classes, that without some such key, much of what he peruses, even in the daily press, must necessarily be unintelligible. It will, therefore, prove almost as valuable in the parlour as in the school or college.

Something could have been saved in the size, and consequently in the cost of this volume, by printing it more closely and in a smaller letter; but as this could only be effected at the expense of the eyes of the reader, and would have increased those already too general causes of that shortness of sight, so strikingly on the advance in this country, it was deemed better for those most interested, to adopt the clear, legible type, and open style by which the word sought for is detected at a glance.

HENRY McMURTRIE.

PALMYRA SQUARE, *August*, 1847.

ABBREVIATIONS.

Ac.,	for	Acoustics.
Anat.,	“	Anatomy.
Ast.,	“	Astronomy.
Bot.,	“	Botany.
Chem.,	“	Chemistry.
Crust.,	“	Crustaceology.
Dyn.,	“	Dynamics.
Ent.,	“	Entomology.
Geol.,	“	Geology.
Geom.,	“	Geometry.
Herp.,	“	Herpetology.
Hyd.,	“	Hydraulics.
Hyg.,	“	Hygiene.
Icth.,	“	Icthyology.
Mal.,	“	Malacology.
Mam.,	“	Mammalogy.
Min.,	“	Mineralogy.
Nat. Hist.,	“	Natural History in general.
Nat. Ph.,	“	Natural Philosophy in general.
Opt.,	“	Optics.
Orn.,	“	Ornithology.
Phys.,	“	Physiology.
Rad.,	“	Radiatology.
Zool.,	“	Zoology generally.

A. S.,	“	Anglo-Saxon.
Ar.,	“	Arabic.
Dut.,	“	Dutch.
Dan.,	“	Danish.
Fr.,	“	French.
Ger.,	“	German.
Goth.,	“	Gothic.
Gr.,	“	Greek.
Heb.,	“	Hebrew.
It.,	“	Italian.
Lat.,	“	Latin.
Sax.,	“	Saxon.
Sw.	“	Swedish.
Pers.,	“	Persian.
Tart.,	“	Tartar.
Wel.,	“	Welsh.
	“	Sh[illegible]

ERRATA.

ARE'OLAR, on page 35, should be on page 30.

MEL'ANITE, on page 151, should be on page 146.

PENAM'ORA, on page 178, should be on page 177.

C. S. W[illegible]

LEXICON SCIENTIARUM.

ABBREVIATIONS.

a, priv.,	for *a* privative, or negative.
a, intens.,	" *a* intensive, or augmentative.
dimin.,	" diminutive.
ex.,	" for example.
in, priv.,	" *in* privative, or negative.
meton.,	" by metonymy, or change of name.
q. v.,	" which see.

ABDO'MEN, Anat., Lat., *abdere*, to conceal. One of the three great cavities of the trunk.

ABDOM'INAL, Anat., same etym. Relating to the abdomen.

ABDUC'TION, Anat., Lat., *abducere*, to lead from. The act of drawing away; the abduction, for instance, of the fourth or little finger, when separated from the third.

ABERRA'TION, Opt., &c., Lat., *aberratio*, deviation. In Optics, this term is applied to two distinct phenomena. When rays of light passing through a lens are unequally refracted, they converge to different foci—this is called the *Aberration of Sphericity*. When, in consequence of refraction, rays of light are decomposed, and an iridescent appearance is given to the object on which they fall, it is called the *Aberration of Refrangibility*. In Hygiene, it simply implies an irregularity of one or more functions.

ABERRA'TION, Ast., Lat., same etymology. An apparent motion of the heavenly bodies, caused by the progressive motion of light and the earth's annual motion.

ABIETIN'EA, Bot., Lat., *Abies*, a Fir-tree. A subordinate group of the Order of the Coniferæ. It includes the Fir, Spruce, &c.

ABNOR'MAL, Phys., Lat., *ab*, against, *norma*, rule. Irregular—deviating from a fixed rule or model.

ABOMA'SUS, Zool., Lat., *ab*, separated from, *omasus*, the many-plies or third stomach of the ruminating Animals. The fourth stomach of these animals.

ABRANCHIA'TA, Zool., Gr., *α*, priv., and βρογχος (*brogchos*), the throat, whence Lat., *branchiæ*, gills. The third Order of the Annulata; so called because they have no apparent external organs of respiration. The Lumbricus or Earth-worm affords an example.

ABSCISS'A, Geom., Lat., *abscido*, I cut off. That part of the diameter of a curve which is contained between either of the extremities of that diameter and a line called the *Ordinate*, and is thus, as it were, cut off or separated from such diameter.

ABSORB'ENTS, Anat., Lat., *ab*, from *sorbere*, to imbibe. A system of vessels so called—Lacteals and Lymphatics—that absorb chyle and lymph.

ACA'CIA, Bot., Gr., ακακια (*akakia*), from ακα (*aka*), a point. A group of Plants, so called from the species first named, which is furnished with spines.

ACALE'PHA, Zool., Gr., ακαληφη (*akalephe*), a Sea-Nettle. The third Class of the Radiata; it comprises the Medusæ, &c.

ACAMP'TOUS, Opt., Gr., α, priv., and καμπτω (*kampto*), to bend. That which does not reflect light.

ACANTHA'CEÆ, Bot., Gr., ακανθα (*akantha*), a spine, or thorn. A natural Order of Plants. They are chiefly tropical.

ACANTHA'CEOUS, Bot., Gr., ακανθικος (*akanthikos*), spiny. Furnished with numerous spines.

ACANTHOCEPH'ALA, Zool., Gr., ακανθα (*akantha*), a spine, and κεφαλή (*kephale*), head. Spine-headed. The first Family of the second Order of intestinal Worms; so called because their proboscis is armed with hooked spines. Certain Worms found in the intestines of the Hog and the liver of the Rat, which have no vulgar names—the *Echynorhynchus* and *Hæruca* belong to it.

ACANTHOP'ODOUS, Icth., Gr., ακανθα (*akantha*), a spine or thorn, and πους (*pous*), a foot. Spine-finned. Fishes so called formerly ; now styled acanthopterygious.

ACANTHOPTERYG'II, Zool., Gr., ακανθα (*akantha*), a spine, and πτερυγιον (*pterugion*), a little wing. Spinous-finned. The first of the two great divisions of Fishes ; so called because their fins are furnished with stiff spines—the Perch, for instance.

ACANTHOP'ODA, Ent., Gr., ακανθος (*akanthos*), a spine, and πους (*pous*), foot. A tribe of coleopterous Insects ; so called because their tibiæ are armed with spines.

ACAUL'ATE, Bot., Gr., α, priv., and καυλος (*kaulos*), a stem. Without any apparent stem.

ACAULES'CENT, Bot., Gr., α priv., and καυλος, a stem. Applied to plants without any apparent stem.

ACCELERA'TION, Ast., Lat., *accelerare*, to hasten. A term in Astronomy variously used, but always implying a comparatively increased motion. When applied to a planet it signifies that its real diurnal motion exceeds its mean diurnal motion.

ACCIP'ITRES, Orn., Lat., *Accipiter*, a Hawk. A name applied to Birds of prey generally. See *Rapaceæ*.

ACCUMB'ENT, Bot., Lat., *accumbo*, I lie down. A term expressive of the position of the radicle of the embryo in Plants, so bent that it rests against one of the cotyledons.

ACEPH'ALA, Zool., Gr., α, priv., and κεφαλὴ (*kephale*), head. Headless. The fourth Class of the Mollusca ; the Oyster, for instance, has no head.

ACEPH'ALOUS, Zool., Gr., α, priv., and κεφαλὴ (*kephale*), head. Headless.

ACEPHAL'OCYST, Zool., Gr., α, priv., κεφαλὴ (*kephale*), head, and κυστις (*kustis*), bladder. A vesicle considered as a Hydatid—one of the Entozoa—most commonly found in the liver.

ACERA'CEÆ, Bot., Lat., *Acer*, the Maple. A natural Order of Plants, consisting of the various species of Maple, Box-Elder, &c.

AÇ'ERATE, Ent., Gr., *α*, priv., and κερας (*keras*), horn. Applied to Insects without antennæ.

ACERO'SE, Bot., Lat., *acus*, a needle. Needle-shaped. A term expressive of the form of certain leaves, like those of the Juniper.

ACETAB'ULUM, Anat., Lat., *acetabulum*, vinegar cup. The socket for the reception of the head of the femur or thigh-bone; so called from its resemblance to the acetabulum of the Romans.

ACET'AL, Chem., Lat., *acere*, to sour. A colourless fluid formed by the action of platinum black on the vapour of alcohol with oxygen. It is a compound of aldehyde and ether.

AÇ'ETATE, Chem., Lat., *acetum*, vinegar. A compound of the second order, or a salt; so called from the acetic acid it contains.

AÇ'ETONE, Chem., Lat., *acetum*, vinegar. A limpid, colourless liquid, obtained by distillation from crystallized acetate of lead and quicklime.

ACE'TYL, Chem., Lat., *acetum*, vinegar. A hypothetical product produced by the abstraction of two atoms of hydrogen from ethyl, and which pervades a series of compounds, including acetic acid, whence its name.

ACHÆ'NIUM, Bot., Gr., *α*, priv., and χαινω (*chaino*), to gape. A small one-seeded pericarp, formed of a single carpel; so called because it is indehiscent, or does not split open when ripe.

ACHLAMYD'EOUS, Bot., Gr., *α*, priv., and χλαμυς (*chlamus*), a cloak. Flowers so styled, in which both calyx and corolla are deficient.

ACHROMAT'IC, Opt., Gr., *α*, priv., and χρῶμα (*chrôma*), colour. Colourless. Modern optical instruments are achromatic; that is, any object viewed through them is seen in its true colours—the aberration of refrangibility being corrected in them. See *Aberration*.

ACHRON'ICAL, Ast., Gr., *α*, priv., and χρονος (*chronos*), time. Untimely. A term applied to a Star or Planet when it rises at sunset, or sets at sunrise.

ACIC'ULAR, Bot., etc., Lat., *acicula*, a needle. Slender, rigid, and sharp pointed.

AÇ'ID,Chem., Lat., *acidus*, sour, from the Gr., ακις (*akis*), a point. A body, liquid, gaseous, or solid, having a sharp or sour taste, capable of turning vegetable blues red.

ACINE'SIA, Phys., Gr., α, priv., and κινεω (*kineo*), I move. Motionless. The interval between the systole and diastole of the heart.

ACI'NUM, Anat., Lat., *acinum*, a grape-seed. A gland-like corpuscle. The liver is composed of a mass of these acini.

ACLEI'DIAN, Zool., Gr., α, priv., and κλεις (*kleis*), key, or clavicle. A term applied to Animals destitute of clavicles.

ACONIT'IC, Chem., Gr., Αχονιτον (*Achoniton*), Wolf's-bane. An acid having Aconitine for its base.

ACON'ITINE, Chem., Gr., Αχονιτον (*Achoniton*), Wolf's-bane. An organic well-established vegeto-alkali that may be obtained from several species of Aconitum.

ACOTYLED'ONOUS, Bot., Gr., α, priv., and κοτυληδων (*kotuledon,*) a dish or porringer. Without cotyledons. A group of Plants, destitute of seminal leaves, called cotyledons—ex., the Dodder.

ACOUS'TICS, Nat. Ph., Gr., ακουω (*akouo*), I hear. The science of sounds.

ACRIDOPH'AGOUS, Mam., Gr., ακριδος (*akridos*), Grasshopper, and φαγειν (*phagein*), to eat. Applied to certain tribes of men which live chiefly on the Locust, Grasshopper, &c.

ACRID'IANS, Ent., Gr., Ακρις (*Akris*), a Grasshopper. A Family of orthopterous Insects, including a variety of subgenera of *Acridium*, whence their name.

AC'ROGENS, Bot., Gr., ακρος (*akros*), the point, and γεινομαι (*geinomai,*) to be born. To grow from the point. A term applied to the first Class of Flowerless Plants, such as the Ferns, because their stems usually grow by elongation from the apex.

ACRO'LEINE, Chem., Lat., *acer*, acrid, and *oleum*, oil. A peculiar substance of a most pungent odour given off from boiling fats and oils, or from the distillation of Glycerin.

ACRO'MION, Anat., Gr., ακρος (*akros*), the point or extremity, and ωμος (*omos*), shoulder. The extremity of the shoulder. A process of the scapula or shoulder-blade so called.

ACROTOM'IC, Min., Gr., ακρον (*akron*), summit, and τεμνω (*temno*), to cut. That line of cleavage which is parallel to the basal plane.

ACTIN'IA, Rad., Gr., ακτιν (*aktin*), a ray. A group of radiated Animals (formerly called Zoophytes); so named on account of their tentacula which radiate from their mouth.

ACTIN'OLITE, Min., Gr., ακτιν, a ray, and λιθος, a stone. A variety of hornblende, usually occurring in fascicular crystals.

ACTINOM'ETER, Nat. Ph., ακτιν (*aktin*), a ray, and μετρον (*metron*), a measure. An instrument for measuring the intensity of the solar rays.

ACULEA'TA, Ent., Lat., *aculeatus*, having a sting. The second section of hymenopterous Insects; so called because the species are usually armed with a retractile sting.

ACU'LEATE, Bot., *same etym.*, spinous. Armed with little spines or prickles.

ACU'MINATE, Bot., Lat., *acuminatus*, pointed. Pointed like a needle.

ACU'TE, Geom., Lat., *acutus*, pointed. An acute angle is any angle that is less than a right angle.

ADAC'TYLOUS, N. H., Gr., α, priv., and δακτυλος (*daktulos*), finger. Applied to Animals whose extremities are not furnished with fingers.

ADAMAN'TINE, Min., Gr., αδαμας (*adamas*), diamond. Resembling diamond.

ADDUC'TION, Phys., Lat., *ad*, to, and *ducere*, to lead. The act of moving one organ toward another—the reverse of abduction.

ADDUCT'OR. Anat., Lat., *ad*, to, and *ducere*, to lead. A term applied to various muscles, antagonists of the abductors.

ADELIN'EA, Min., Gr., αδηλος (*adelos*), obscure. The eleventh Order of the second Class of Minerals. It contains Blende, Sulphuret of Manganese, Red Antimony, &c.

ADELOP'ODOUS, Zool., Gr., α, priv., δηλος (*delos*), apparent, and πους (*pous*), foot. Applied to Animals without apparent feet.

ADENOSTY'LEÆ, Bot., Gr., αδην (*aden*), a gland, and στυλος (*stulos*), a style. A division of composite Plants in which the branches of the style are covered with long glandular hairs.

A'DEN, Anat., Phys., Gr., αδην (*aden*), a gland. Hence *adeniform*, gland-shaped—*adenalgia*, pain in the glands, &c.

AD'EPS, Anat., Lat., *adeps*, fat. Fat.

ADIPOCI'RE, Chem., Lat., *adeps*, fat, and *cera*, wax. A term applied to a singular substance resembling spermaceti, into which the soft parts of the animal body are sometimes converted after death.

ADIPO'SE, Anat., Lat., *adeps*, fat. A term applied to fatty tissues.

AD'NATE, Bot., Lat., *adnascor*, to cling to from birth. A word expressing the mode of the attachment of the anther of a flower to its filament, clinging to it throughout.

ADVENTI'TIOUS, Bot., Lat., *adventicius*, arriving by chance. A name applied to buds produced from the roots, and still more frequently from the woody stems, of Plants, when they are overcharged with sap, as happens whenever a tree in good health is severely pruned. These buds frequently follow a wound of the bark.

ADYNA'MIA, Hyg., Gr., α, priv., and δυναμις (*dunamis*), strength. Weakness. Debility of the vital organs.

ÆGAG'ROPILES, Anat., Gr., αιξ (*aix*), goat, αγριος (*agrios*), wild, and πιλος (*pilos*,) hair. Applied to those singular balls of hairs found in the stomach of the Ruminantia.

ÆOL'IPILE, Nat. Ph., Lat., *Æ'olus*, god of the winds, and *pila*, a ball. An instrument (hydraulic) used for demonstrating the conversion of water into steam.

AERIF'EROUS, Phys., Lat., *aer*, air, and *ferre* to convey. Conveying air.

AERO-DYNAM'ICS, Nat. Ph., Gr., αηρ (*aer*), air, and δυναμις (*dunamis*), power. That science which considers the motion of the air and its mechanical effects.

A'EROLITE, Nat. Ph., Gr., αηρ (*aer*), the air, and λιθος (*lithos*), a stone. Literally, an air-stone. Mineral masses of uncertain origin that fall upon the earth from the air.

A'EROSTAT, Nat. Ph., αηρ (*aer*), air, and ἱσταμαι (*histamai*), I support myself. A balloon.

AEROSTA'TION, Nat. Ph., see *Aerostat*. The act of making balloons or governing them in the air.

ÆSTIVA'TION, Bot., Lat., *æstivatio*, a summer retreat. A word used by Botanists to express the manner in which the floral organs are arranged in the flower-bud. The æstivation may be valvate, induplicate, involute, &c.

ÆTIOL'OGY, Hyg., Gr., αιτια (*aitia*), cause, and λογος (*logos*), a treatise. That branch of Hygiene which investigates the causes of disease. It is also applied to the revelation of the causes of any phenomenon whatever.

Æ'TITE, Min., Gr., Αετος (*Aetos*), an Eagle. A ferruginous mineral, formerly so called because it was asserted that it was always found in the nest of the Eagle.

AF'FERENT, Anat., Lat., *ad*, to, and *ferre*, to carry. Vessels so called because they convey lymph to glands.

AFFIN'ITY, Chem., Lat., *affinitas*, relation, alliance. Chemical affinity may be defined as a special attraction between different kinds of matter.

AGAM'IA, Bot., Gr., α, priv., and γαμος (*gamos*), nuptials. Unmarried. An obsolete botanical term. See *Cryptogamous*.

AGAM'IANS, Herp., Gr., αγαμαι (*agamai*), I wonder at. A section of Saurians; so called because they have the power of changing their colour, several shades lighter or darker.

AG'ATE, Min., Gr., Αχατης (*Achates*), a river of Sicily so called. A term applied to this partly transparent and beautiful Mineral because it was first discovered on the banks of that river.

AGA'VE, Bot., Gr., αγαυος (*agauos*), admirable. A group of Plants, so called from their beauty. They are usually called *Aloes*.

AGLOS'SAL, Ent., Gr., α, priv., and γλωσσα (*glossa*), tongue. A term applied to certain lepidopterous Insects without a tongue.

AGOM'PHIA, Rad., Gr., α, priv., and γομφιος (*gomphiŏs*), a tooth. A term applied by Ehrenberg to those rotiferous Animalcula which are edentated or toothless, and therefore called *Agomphians.*

AGRYP'NIA, Hyg., Gr., αγρυπνεω (*agrupneō*), to lie awake. Inability to sleep.

AITIOL'OGY, Hyg., Gr., see *Etiology,* with which it is synonymous.

A'LA, Anat., Lat., *ala,* a wing. A term frequently applied by Anatomists to thin projecting parts of the body; also by Botanists in the same way.

ALBI'NO, Phys., Lat., *albus,* white. A term applied to those Animals in which the colouring matter of the hair, eyes, and skin is more or less deficient.

ALBU'MEN, Chem., Lat., *albus,* white. An organic element found in Animals and Plants. It forms the base of the white of egg.

ALBUR'NUM, Bot., Lat., *alburnum,* sap-wood. The new wood between the bark and heart of a tree.

ALCOA'TES, Chem., Ar., *alco,* for *alcohol,* q. v. and *ate,* a termination indicating a salt. A crystalline compound formed by the solution of several salts, such as the chloride of zinc.

AL'COHOL, Chem., Ar., ال (*al*), the, and كحل (*kuhl*), collyrium, or astringent. A liquid obtained from all fluids which have undergone the vinous fermentation. It is highly inflammable, and has never been frozen. The spirits of wine of the shops is alcohol largely diluted with water.

AL'CYONS, Orn., Gr., 'Αλκυων (*Halkuōn*), the Kingfisher. One of Temminck's Orders of Birds, of which the Kingfisher is the type.

ALDEHY'DE, Chem., from *alcohol,* and *dehydrogenatum,* or dehydrogenized alcohol. It is an oxide of Acetyl, a colorless fluid of a most suffocating odour, and highly combustible, that dissolves phosphorus, sulphur, and iodine.

ALEC'TROIDS, Orn., Gr., Αλεκτωρ (*Alektōr*), the Cock and Hen. A term applied to poultry in general.

ALEM'BIC, Chem., Ar., ال (*al*), the, and Gr., αμβιξ (*ambix*), vase or pot. An instrument used for distillation.

AL'GÆ, Bot., Lat., *Alga*, a marine Plant. A natural Order of Plants. It includes all the genera *Fucus*, *Rhodomenia*, &c., called *Sea-Weed*.

ALISMA'CEÆ, Bot., Gr., Αλισμα (*Alisma*), the Water Plantain. A natural Order of Plants.

ALIZA'RIN, Chem., *Alizari*, Madder roots; so called by the Turks. A red cystalline matter obtained from the roots of the Madder, the *Rubia tinctorum*.

AL'KALIES, Chem., Ar., ال (*al*), the, and قلي (*kali*), soap-ashes. Oxides of metals possessing peculiar qualities, such as having a great affinity for acids. Soda, Potash, &c., are alkalies.

ALKALIM'ETER, Chem., Ar., *Alkali*, (q. v.) Alkali, and Gr., μετρον (*metron*), a measure. A straight tube graduated into a hundred parts, and peculiarly arranged for the purpose of ascertaining how many measures of a diluted acid are required to neutralize one hundred grains of soda.

ALLOPHYL'LOUS, Bot., Gr., αλλος (*allos*), other, or alternate, and φυλλον (*phullon*), leaf. Plants with alternate leaves.

ALLOY', Chem., Fr., *aloi*, a standard of purity in metals. The foreign metals found with any one in particular. Thus, tin from the ore in the vein is *alloyed* with iron, copper, arsenic, and antimony.

ALLU'VIAL, Geol., relating to an alluvium, as an alluvial formation. See *Alluvium*.

ALLU'VIUM, Geol., Lat., *alluo*, to wash down. A formation so called by Geologists, consisting of loose sand, gravel, and mud, resembling the deposit on low lands after an inundation.

ALTER'NATE, Bot., Lat., *alternus*, one after another. Leaves are said to be alternate when they are inserted one above another at regular distances round the stem.

AL'TITUDE, Ast., Lat., *altitudo*, height. The arc of a vertical circle intercepted between the horizon and the centre of any celestial body.

AL'ULÆ, Ent., Lat., dimin., of *ala*, a wing. Two small membranous scales found in dipterous Insects above the *halteres*—very observable in the common Fly.

AL'UM, Chem., Lat., *alumen*, alum. A sulphate of Alumina, prepared in various ways, which crystallizes in regular octohedrons.

ALU'MINA, Chem., Lat., *alumen*, alum. An oxide of *Aluminium*, very abundant in felspar, &c.

AL'UMINE, Chem., Lat., *alumen*, alum. A double salt, consisting of sulphate of alumine and sulphate of potash. Like all the alkaline earths, it has a metallic base, called *Aluminium*.

ALUMIN'IUM, Chem., Lat., *alumen*, alum, and *ium*, a termination indicating a metal. One of the second Class of elementary bodies. It is a metal of gray colour, lustrous, fusible only at a high temperature, and, when heated in oxygen, burns and produces alumina.

ALVE'OLAR, Anat., Lat., *alveus*, a cavity. A term expressive of the cellular form of the processes which receive the roots of the teeth.

ALVE'OLATE, Bot., Lat., *alveolus*, a little vase, with deep pits or cells, resembling a section of a honey-comb.

AMAL'GAMS, Chem., Gr., ἁμα (*hama*), together, and γαμειν (*gamein*), to join. Alloys of mercury with other Metals. That, for instance, used for electrical purposes, consists of mercury (6), zinc (2), and tin (1).

AMARANTHA'CEÆ, Bot., Gr., α, priv., and μαραινω (*marainō*), to wither. A natural Order of Plants; so called from the dry and enduring richly coloured flowers of some of the genera.

AMARYLLIDA'CEÆ, Bot., Lat., *Amaryllis*, the name of a country girl celebrated by Virgil in his Eclogues. A natural Order of Plants, composed of bulbous Plants bearing graceful and showy flowers, such as the *Amaryllis*, *Narcissus*, &c.

AM'BITUS, Mal., Bot., Lat., *ambitus*, contour. Circumference or outline of the valves of a Shell. Bot., the outer rim of a frond, receptacle, &c.

A'MENT, Bot., Lat., *amentum*, a thong. This word is synonymous with *catkin*, a spike with scaly bracts that usually fall together after flowering in one united body, as in the *Willow*, *Birch*, &c.

AMENTA'CEOUS, Bot., Lat., *amentum*, the thong attached to the handle of a spear, by which the instrument was recovered when thrown. A thong. Applied to Plants of which the inflorescence is an ament.

AMETABO'LIAN, Ent., Gr., α, priv., and μεταβολη (*metabole*), change. A term applied to those Insects which do not undergo a metamorphosis.

AM'ETHYST, Min., Gr., α, priv., and μεθυω (*methuō*), I am drunk. A precious stone of a bluish colour; so called because the ancients believed that, when worn on the finger, it prevented inebriety.

AMIAN'THUS, Min., Gr., α, priv., and μιαινω (*miainō*), to injure. A variety of the mineral called *Tremolite*. Asbestus is one of its synonyms. It is so styled from its resistance to the action of fire, a property which, combined with its fibrous nature, enabled the ancients to construct the celebrated *incombustible beds* for their funeral pyres.

AM'IDIN, Chem., Lat., *amylum*, starch. A gelatinous starch, obtained by breaking the coats of the grains of fecula by boiling them.

AMMO'NIA, Chem., Gr., αμμος (*ammos*), sand. A volatile alkali, usually obtained from sal-ammoniac, which originally was so called from the fact that it was obtained from the Libyan *sands*, in the vicinity of the temple of Jupiter Ammon.

AMMO'NIUM, Chem., *ammonia*, q. v., and *ium*, termination signifying a Metal. A hypothetical substance isomorphous with potassium and sodium, and acting like a Metal, but which has not yet been isolated.

AM'MONITES, Mal., Gr., αμμος (*ammos*), sand. A genus of extinct, fossil, univalve Mollusca; sometimes called *Cornua Ammoni*, or the Ram's horns; so styled from their resemblance to the horns on the statue of Jupiter Ammon, which received these ornaments from the fact that Jupiter appeared to Bacchus in the deserts (*ammos*, sand) in the form of a Ram. They vary in diameter from an inch to several feet.

AMPHIB'IA, Zool., Gr., αμφι (*amphi*), both, and βιος (*bios*), life. Animals that can respire air, free, and through the medium of water. The third Tribe of the Carnivora—improperly so called, however, for, if confined under water, they die.

AMPHIBIOL'OGY, Zool., Gr., αμφιβιος (*amphibios*), amphibious, and λογος (*logos*), a treatise. That branch of Zoology which treats of amphibious Animals.

AMPHIB'OLITE, Min., Gr., αμφιβολος (*amphibolos*), equivocal. Applied to Hornblende, because it so closely resembles Augite that many eminent Mineralogists consider them one Mineral.

AMPHI'DE, Chem., Gr., αμφι (*amphi*), both sides, and ειδος (*eidos*), form. A term applied to salts produced by one or the other of the amphigen Class (oxygen, sulphur, &c.) with two radicals—one of which forms a base, the other an acid.

AMPHIDIARTHRO'SIS, Anat., Gr., αμφι (*amphi*), on both sides, and διαρθρωσις (*diarthrosis*), articulation. The articulation of the lower jaw by its two condyles.

AMPHIHEXAHE'DRAL, Min., Gr., αμφι (*amphi*) on both sides, ἑξ (*hex*), six, and ἑδρα (*hedra*), facet or side. A term applied by Haüy to certain crystals, hexahedral in opposite directions.

AMPHIP'ODA, Crust., Gr., αμφι (*amphi*), on each side, and πυς (*pous*), foot. The fourth Order of the first great section of the Crustacea; v., Malacostraca.

AMPHISBE'NÆ, Herp., Gr. αμφις (*amphis*), both ways, and βαινω (*bainō*), to move, or walk. Serpents that have the faculty of creeping either forwards or backwards without turning, and for this reason vulgarly called two-headed snakes.

AMPHITRO'POUS, Bot., Gr., αμφι (*amphi*), both sides, and τρεπω (*trepo*), to turn. Ovules, so called because the funiculus is at right angles with their axis, and consequently its base and apex are lateral, or on each side.

AMPLEX'ICAUL, Bot., Lat., *amplector*, I clasp, and *caulis*, a stem. Clasping.

AM'PLITUDE, Ast., Lat., *amplitudo*, extent. The distance of a Star from the east or west point of the horizon at the time of its rising or setting.

AMYGDA'LEÆ, Bot., Gr., αμυγδαλη (*amugdale*), an Almond. One of the sub-orders of the Rosaceæ, containing the Almond, Peach, Plum, &c.

AMYG'DALIN, Chem., Gr., αμυγδαλη (*amugdale*), the Almond. A principle existing in the bitter-almond, &c., crystallizing in large transparent prisms of a silky lustre.

AMYG'DALOID, Geol., Gr., αμυγδαλον (*amugdalon*), an almond, and ειδος (*eidos*), form. Applied to rocks in which pebbles of other Minerals are embedded.

AMYLA'CEOUS, Chem., Lat., *amylum*, starch. Relating to fecula or starch—starch-like.

ANACAMP'TIC, Ac., Gr., ανα (*ana*), which, here, marks reiteration, and καμπτω (*kamptō*), to bend. Reflecting; applied to sound or an echo.

ANACARDIA'CEÆ, Bot., Gr., ανα (*ana*), resemblance, and καρδια (*kardia*), heart. Heart-shaped. A natural Order of Plants, containing the genera Anacardium (the Cashew), Pistachia, &c.

ANACLAS'TICS, Opt., Gr., ανα (*ana*), again, and κλαω (*klaō*), to break, synonymous with *Dioptrics*, q. v.

ANALEC'TRIC, Nat. Ph., ανα (*ana*), through, and ηλεκτρον (*elektron*), amber, or electricity. Applied to a body in which electricity cannot be excited by friction, but which receives it through other bodies.

ANALEM'MA, Gr., αναλημμα (*analemma*). A planispherical chart on which all the circles of the sphere are laid down on a plane surface.

ANAL'YSIS, Chem., &c., Gr., αναλυσις (*analusis*), dissolution. The act of separating the elements of a compound body. The only sure means of acquiring knowledge. See *Synthesis*.

ANAMORPH'IC, Min., (Gr.,) ανα (*ana*), above and μορφη (*morphe*), form. A term applied to Crystals in which the nucleus is upside-down, or reversed, with respect to the natural position of the Crystal itself.

ANAMORPHO'SIS, Bot., Gr., ανα (*ana*), backward, and μορφη (*morphe*), form. Applied to any organ that assumes an unusual form, as when the calyx of the Rose assumes the form of a fruit.

ANASTOMO'SIS, Anat., Gr., ανα (*ana*), with, and στομα (*stoma*), mouth. Mouth to mouth. A term applied to the junction of two vessels or nerves.

ANAT'OMY, Zool., Gr., ανα (*ana*), through, and τεμνω (*temnō*), I cut. That science which, by dissection, exposes the structure of organic bodies.

ANATRO'POUS, Bot., Gr., ανα (*ana*), from above, and τρεπω (*trepō*), to turn. Inverted. A term explanatory of one of the positions of the ovule, or when the apex turns down to the funiculus.

ANCIP'ITAL, Bot., Lat., *anceps*, two-edged. Double edged.

ANDRÆ'CIUM, Bot., Gr., ανδρεων (*andreon*)—from ανηρ (*aner*), a male—a hall from which females were excluded. The staminate or male system of a flower.

ANEMOG'RAPHY, Nat. Ph., Gr., ανεμος (*anemos*), wind, and γραφω (*graphō*), I describe. The science or description of the winds.

ANEM'ONE, Bot., Gr., Ανεμωνη (*Anemone*), from ανεμος (*anemos*), the wind—that is, the Wind-Flower; so called, says Pliny, because it only opens when the wind blows. The *Anemony*.

ANEM'OSCOPE, Nat. Ph., Gr., ανεμος (*anemos*), wind, and σκοπεω (*skopeō*), I look. A vane. An instrument which indicates the direction of the wind.

ANFRAC'TUOUS, Bot., Lat., *anfractus*, winding backward and forward. Any part of a Plant that is repeatedly folded until its natural or normal form is lost.

ANGIOG'RAPHY, Anat., Gr., αγγειον (*aggeion*), a vessel, and γραφη (*graphe*), a description. The anatomy of the vascular system.

ANGIOSPER'MA, Bot., Gr., αγγειον (*aggeion*), a vase, and σπερμα (*sperma*), seed. The second Order of the Linnean Didynamia; so called because the seeds are contained in a vessel or pericarp.

ANGIOSPER'MOUS, see *Angiosperma.* Plants of which the seeds are evidently contained in a pericarp.

AN'GLE, Ast., &c., Gr., αγκυλος (*agkulos*), hooked, bent. The space between two lines which meet in a point.

ANGUILLIFOR'MÆ, Icth., Lat., *Anguilla*, an Eel, and *forma*, shape or form. Eel-like. The only Family of the fourth Order of Fishes.

ANHELA'TION, Hyg., Lat., *anhelans*, panting. Hurried respiration.

ANHY'DRATE, Chem., Min., Gr., α, priv., and ὑδωρ (*hudōr*), water. A mineral so called, or sulphate of lime in a crystalline form without water.

ANHY'DROUS, Chem., Gr., see *Anhydrate.* Containing no water.

AN'IONS, Chem., ανα (*ana*), upwards, and ιων (*iōn*), going. Substances which are evolved from their combinations at the surface by which the electricity enters the electrolyte when decomposed by electricity.

ANISOT'OMOUS, Bot., Gr., ανισος (*anisos*), unequal, and τεμνω (*temnō*), to cut. A term applied to the calyx of Flowers in which the alternate divisions are smaller than the rest.

AN'NUALS, Bot., Lat., *annus*, a year. A term applied to those Plants of which the flower and fruit consume all the nourishment of the root and stem in the same year that they spring from the seed. They, of course, live but one year.

ANNULA'TA, Zool., Lat., *annulus*, a little ring. Formed of little rings. The first Class of articulated Animals. The Lumbricus, or Earth-worm, is one of them.

AN'ODE, Nat. Ph., Gr., ανα (*ana*), up or above, and ὁδος (*hodos*), the way. The point or place in which electricity passes into an electrode. See *Kathode.*

ANODORI'TA, Mal., Gr., α, priv., and οδους (*odous*), a tooth. A group of bivalve Shells with a simple and toothless hinge.

ANŒ'AL, Phys., α, priv., and νοος (*noos*), mind. Imbecile, idiotic.

ANOM'ALY, Ast., Gr., α, priv., and ὁμαλος (*homalos*), equal, or similar. The distance of a Planet from the aphelion.

ANONA'CEÆ, Bot., *Menona*, the Malayan name of the *Anona*, the type of the Order. One of the natural Orders of Plants. It contains the *Custard Apple*, *Cherimoyer*, &c.

ANOPLOTHE'RIUM, Mam., Gr., ανοπλος (*anoplos*,) unarmed, and θηριον (*therion*), beast. An extinct or fossil Animal, so called from the shortness and weakness of its canine teeth, and the absence of claws and horns.

ANOS'MIA, Hyg., Gr., α, priv., and οσμη (*osme*), odour. Loss of smell.

ANOS'TOMOUS, Icth., Gr., ανω (*anō*), above, and στομα (*stoma*), mouth. Said of certain Fishes in which the mouth is situated on the superior face of the snout, and looks upwards.

ANTARC'TIC, Ast., Gr., αντι (*anti*), opposite, and Αρκτος (*Arktos*), a Bear. Opposite to the constellation called the Bear (Ursa), which is in the vicinity of the arctic pole. A circle surrounding the south pole, and parallel with the equator.

ANTEN'NÆ, Ent., Lat., *antenna*, literally, a ship's-yard. A term applied to what are commonly called the feelers or horns of Insects. Articulated organs of touch, perhaps smell, differing greatly in length and form.

AN'THER, Bot., Gr., ανθος (*anthos*), a flower. An organ placed at the summit of the filament of a Flower, and which contains the pollen.

ANTHERID'IA, Bot., Gr., ανθος (*anthos*), a flower, and ειδος (*eidos*), form. Anther-like. Membranous sacs (organs of fructification) in the Mosses; so called because they are considered as analogous to stamens.

ANTHE'SIS, Bot., Gr., ανθησις (*anthesis*), inflorescence, from ανθος (*anthos*), a flower. The full and perfect development of a Flower.

ANTHI'CIDA, Ent., Gr., ανθος (*anthos*), a flower, and Lat., *cædo*, I cut, or separate. A tribe of coleopterous Insects; so called because they cut the corolla of flowers.

ANTHIOPH'ILA, Ent., Gr., ανθος (*anthos*), a flower, and φιλος (*philos*), a friend. A Family of Hymenoptera that collect pollen from flowers—ex., the Bee.

ANTHO'BIA, Ent., Gr., ανθος (*anthos*), a flower, and βιος (*bios*), life. A tribe of Coleoptera that lives on flowers and leaves.

ANTHO'ÇERA, Bot., Gr., ανθος (*anthos*), a flower, and κερας (*keras*), horn. A group of Plants; so called because their monopetalous flower has the shape of a horn.

ANTHRACIN'EA, Min., ανθραξ (*anthrax*), coal. The second Order of the third Class of Minerals. It contains the various sorts of Coal, and Graphite or Plumbago.

ANTHOCAR'POUS, Bot., Gr., ανθος (*anthos*), a flower, and καρπος (*karpos*), fruit. A term applied by Botanists to masses of inflorescence, in which the fruits, or floral envelopes, adhere to each other—the Pine-apple, for instance.

ANTHROPOMOR'PHOUS, Zool., Gr., ανθρωπος (*anthropos*), Man, and μορφη (*morphe*), form. Resembling Man.

ANTHROPOL'OGY, Zool., Gr., ανθρωπος (*anthropos*), Man, and λογος (*logos*), a discourse. The natural history of Man.

ANTHU'RUS, Bot., Gr., ανθος (*anthos*), a flower, and ουρα (*oura*), a tail. A spike of small flowers packed closely on a long axis.

ANTICLI'NAL, Geol., Gr., αντι (*anti*), against, and κλινειν (*klinein*), to incline. An imaginary line representing an axis, so called by Geologists. Of a house with steep roof that points north and south, the shingles or slates rise to the ridge which, of course, runs east and west; the line along this ridge, towards which the roof rises, is the anticlinal axis. See *Synclinal.*

ANTIENNEAHE'DRON, Min., Gr., αντι (*anti*), against, εννεα (*ennea*), nine, and ἑδρα (*hedra*), face, or side. A term applied by Haüy to crystals with nine facets on opposite sides.

ANTI-HE'LIX, Anat., Lat., *anti*, before, and *Helix*, a Snail. A term applied to a small elevation of the pavilion of the Ear before the helix.

AN'TIMONY, Min., Gr., αντι (*anti*), against, and μονος (*monos*), a monk. Kill-monk. A somewhat doubtful etymology; but so given because it is said by Furetières to have been first used in an experiment upon Hogs, which it fattened; but when put into the soup of some Monks it killed them all. It is a Metal usually found in the state of a sulphuret.

ANTISEP'TIC, Hyg., &c., Gr., αντι (*anti*), against, and σηπω (*sepō*), to rot. Preventing putrefaction. Charcoal is antiseptic.

ANTI-TRA'GUS, Anat., Gr., αντι (*anti*), opposite to, and Τραγος (*Tragos*), a Goat, or the tragus. A little process of the pavilion of the ear opposite the tragus, which see.

AN'TRUM, Anat., Gr., αντρον (*antron*), a cave. A term applied to cavities in bones—more especially to a large one in the upper jaw, called the Antrum Highmorianum.

AODON'TIC, Icth., Gr., α, priv., and οδους (*odous*), tooth. Applied to Fishes without any apparent teeth.

AOR'TA, Anat., Gr., αορτη (*aorte*), a vessel, a vase. The great artery that springs from the left ventricle of the heart, and from which arise all other arteries.

APET'ALOUS, Bot., Gr., α, priv., and πεταλον (*petalon*), a leaf. This word literally means leafless, but is restricted to flowers destitute of petals, or parts of the corolla, and not to the ordinary leaves.

A'PEX, Anat., Mal., &c., Lat., *apex*, the extreme point. In Malacology, the tip of the *Spire.*

APHE'LION, Ast., Gr., α, priv., and ηλιος (*helios*), the sun. That point in the orbit of a celestial body, which is at the greatest distance from the sun.

APHIDEPHA'GI, Ent., Gr., Αφις (*Aphis*), and φαγω (*phago*), I eat. The second Family of the Trimera or fourth section of the Coleoptera; so called because their natural food is the Aphis, that little, soft, green Insect which is so destructive to the buds, &c., of the Rose. The Lady-bug is one of the Family of the Aphidephagi.

APHI'DES, Ent., Gr., Αφις (*Aphis*), a common name among the Greeks for a variety of Insects from Αφια (*aphia*), some unknown Plant on which they feed. The second Family of Hemipterous Insects.

APHO'NIA, Phys., Gr., α, priv., and φωνη (*phone*), voice. Loss of voice.

APH'ORISM, Phys., Gr., αφορισμος (*aphorismos*), a separation, definitiòn. A concise and exact definition of the qualities or conditions of any thing, as, for instance, the Aphorisms of Hippocrates.

APHYL'LÆ, Bot., Gr., α, priv., and φυλλον (*phullon*), leaf. Leafless. The third tribe of the Cellulares, which are without leaves.

APHYL'LATE, Bot., Gr., α, priv., and φυλλον (*phullon*), a leaf. Without leaves. A term applied to Plants destitute of ordinary leaves.

APLAS'TIC, Phys., α, priv., and πλασσω (*plassō*), I form. Incapable of producing organs.

APOCAR'POUS, Bot., Gr., απο (*apo*), removed from, and καρπος (*karpos*), fruit. The pistils of a flower are so called, when they are all separate, or the reverse of syncarpous.

AP'ODA, Icth., α, priv., and πους (*pous*), foot. Footless. The fourth Order of Malacopterygious Fishes, consisting of the Eels. Also, the second Order of the first Class of the Radiata.

AP'OGEE, Ast., Gr., απο (*apo*), far, γη (*ge*), the earth. At a distance from the earth. That point in the orbit of a Planet in which it is at its greatest distance from the earth.

APOMECOM'ETRY, Geom., Gr., απο (*apo*), far, μηκος (*mekos*), distance, and μετρον (*metron*), measure. The art of ascertaining or measuring the distance of remote objects.

APONEURO'SIS, Anat., Gr., απο (*apo*), from, and νευρον (*neuron*), a nerve. White membranes (not nervous in tissue) connected with the muscles. All white membranes were considered by the ancients as expansions of nerves, hence this misnomer, the tissue being cellular.

APOPH'ANOUS, Min., Gr., αποφαινω (*apophaino*), I demonstrate. A term applied by Haüy to those Crystals in which the position of the nucleus is visible, as well as the direction of the decretions.

APOPH'YLLITE, Min., Gr., απο (*apo*), separation, and φυλλον (*phullon*), leaf. Pyramidal Zeolite; so called because, when exposed to heat, it separates into thin lamina or leaves.

APOPH'YSIS, Anat., Gr., απο (*apo*), from, and φυομαί (*phuomai*), to spring, or rise from. A term applied to elevations or processes on bones.

APOTHE'CIA, Bot., Gr., απο (*apo*), away from, and θηκη (*theke*), a sheath. Lichens in which the sporules are not enclosed in membranous tubes or Thecæ.

AP'OTHEM, Geom., Gr., απο (*apo*), far, and τιθημι (*tithemi*), to place. A perpendicular line drawn from the centre of a regular polygon over one of its sides.

AP'OTOME, Geom., Gr., αποτεμνω, (*apotemnō*), I cut off. The remainder or difference of two incommensurable quantities.

APPRESS'ED, Bot., Lat., *adpressus*, pressed against. One of the modes of Prefoliation, or manner in which leaves are packed in the bud. It is that in which the unexpanded leaves are flat, and placed face to face in pairs.

APTENODY'TES, Orn., Gr., απτην (*apten*), that cannot fly, and δυτης (*dutes*), diver. A name applied to the Penguins, which, though furnished with little wings, only use them as paddles, and dive with great facility.

AP'TERA, Ent., Gr., α, priv., and πτερον (*pteron*), wing. Wingless. A group of Insects composing four of the twelve Orders of the Class, viz., the Myriapoda, Thysanoura, Parasita, and Suctoria.

APTERODI'CEROUS, Ent., Gr., α, priv., πτερον (*pteron*), wing, δις (*dis*), two, and κερας (*keras*), horn. Applied to Insects without wings, and furnished with two antennæ.

APTERONO'TOUS, Icth., Gr., α, priv., πτερον (*pteron*), fin, and νωτος (*nōtos*), back. Applied to Fishes destitute of dorsal fins.

AP'SES, Ast., Gr., αψις (*apsis*), arc, or curve. The two points in the orbits of Planets which are at the greatest and least distance from the centre of motion.

A'QUEOUS, Geol., Lat., *aqua*, water. A group of Rocks, or a Formation, so called by Geologists, from its origin, which is by a sedimentary deposit from water.

AQUIFOLIA'CEÆ, Bot., Lat., *aquifolius*, relating to the Holly. A natural Order of Plants. It consists of trees or shrubs resembling the *Holly* in their leaves, &c.

ARA'CEÆ, Bot., Lat., *Arum*, the Plant now known under the same name. A natural Order of Plants. It consists of a variety of well-known genera, such as the Acorus, Sweet-flag, Symplocarpus, or Skunk-cabbage, &c.

ARACHNO'DEA, Zool., Gr., Αραχνη (*Arachné*), a Spider, and ειδος (*eidos*), form. Spider-like Animals. The second Class of the Articulata.

ARACH'NODES, Zool., Gr., Αραχνη (*Arachné*), a Spider. Spiders.

ARACHNOI'DEA, Anat., Gr., αραχνη (*arachné*), a cobweb, and ειδος, form. A term applied to the second of the three membranes that cover the brain and spinal marrow, the *Tunica arachnoidea*, so called from its cobweb-like tissue.

AR'BOR VI'TÆ, Anat., Lat., *arbor*, a tree, and *vita*, life. Tree of life. A term applied to a part of the cerebellum, where the cineritious and white matter are so arranged as to present an arborescent appearance.

ARC, Geom., Lat., *arcus*, a bow. Any portion of the circumference of a circle.

AR'CIFORM, Anat., Gr., ακρα (*akra*), top, and μορφὴ (*morphe*), form. A term applied to the direction of the fibres of the corpora pyramidalia of the medulla oblongata.

ARC'TIC, Ast., Gr. Αρκτος (*Arktos*), a Bear. A circle surrounding the north pole, and passing through the constellation of the Bear.

ARCTU'RUS, Ast., Gr., Αρκτος (*Arktos*), a Bear, and ουρα (*oura*), tail. A Star of the first magnitude; so called because it is placed close to the tail of the Great Bear.

ARC'UATE, Mal., Lat., *arcuatus*, arched. Bent in the form of a bow or an arch.

ARENA'CEOUS, Geol., Lat., *arena*, sand. One of the three divisions of aqueous Rocks; so called from being made up of silicious, or flinty granules.

ARENIC'OLA, Ent., Lat., *arena*, sand, and *colo*, I love. A tribe of Coleoptera that frequent sandy localities.

AREOM'ETER, Chem., Gr., αραιος (*araios*), light, subtle, and μετρον (*metron*), measure. An instrument for ascertaining the weight of fluids lighter than water.

ARGILLA'CEOUS, Geol., Gr., αργιλλος (*argillos*), clay, or argil. One of the series of aqueous rocks is so called.

AR'GILLITE, Min., Gr., αργος (*argos*), white. Clay-slate.

ARIL'LUS, or **A'RIL**, Bot., Lat., *arilla*, a red rag. A membrane arising from the placenta, and partially or completely enveloping it. *Mace* is the aril of the *Nutmeg*. Its function is unknown.

ARIS'TATE, Bot., Lat., *arista*, a sort of bristle like that on Wheat. An *Awn*.

ARISTOLOCHIA'CEÆ, Bot., Gr., Αριστολοχια (*Aristolochia*), a well-known medicinal Plant so called. A natural Order of Plants. It includes the Snake-roots, &c.

ARO'MA, Chem., Gr., αρωμα (*arōma*), perfume. The fragrance arising from the volatile oil of Plants.

AROMAT'IC, Chem., Gr., αρωμα (*arōma*), perfume. Exhaling a perfume.

ARS'ENIC, Chem., Gr., αρσην (*arsen*), man, or male, and νικαω (*nikaō*), to kill. A Metal, sometimes found native, most usually, however, combined with other metals, particularly cobalt and nickel. This deadly poison may always be detected by exposing it to heat, when it gives out a strong odour like that of garlic.

AR'TERY, Anat., Gr., αηρ (*aer*), air, and τηρειν (*terein*), to preserve, to contain. Vessels which convey blood *from* the heart to every part of the body; so called because the ancients thought they contained air.

ARTE'SIAN, Nat. Ph., see *Well*.

ARTHRO'DIAL, Anat., Gr., αρθρον (*arthron*), a joint. That sort of articulation which allows of almost unlimited motion.

ARTIC'ULAR, Anat., Lat., *artus*, a joint. Relating to the articulations or joints, as the articular cartilage.

ARTICULA'TA, Zool., Lat., *articulus*, a joint. Articulated Animals. The third great division or form of structure of the Animal kingdom. It comprises the Annulata, Crustacea, Arachnodea, and Insecta.

ARYT'ENOID, Anat., Gr., αρυταινα (*arutaina*), a ladle, and ειδος (*eidos*), shape. Two cartilages of the Larynx; so called from their form.

ASBES'TUS, Min., Gr., ασβεστος (*asbestos*), inextinguishable. See *Amianthus*.

ASCAR'IDES, Zool., Gr., ασκαριζω (*askarizō*), to wriggle. A term applied to certain Entozoa, from their perpetual motion.

ASCID'IA, Rad., Gr., ασκιδιον (*askidion*), a little leathern bottle. A singular marine Animal, somewhat resembling a large egg pendant from a narrow stem, by which it is attached to the rocks, and which, consequently, has no power of locomotion.

ASCID'IOUS, Bot., Gr., ασκιδιον (*askidion*), a small leathern bottle. Plants, so called where the petioles (usually) are converted into little *pitchers*, which replace the ordinary leaves, as in the *Nepenthes* where this pitcher is actually closed by a lid—the *Sarracenia*, &c.

ASCID'IUM, Bot., Gr., ασκος (*askos*), a bottle. The pitcher-like appendage to certain Plants, such as that of the Nepenthes.

ASCITI'TIOUS, Mal., Lat., *adscititius*, borrowed. Supplementary.

ASCLEPIADA'CEÆ, Bot., Gr., Ασκληπιος (*Asklepios*), Esculapias. A natural Order of Plants, so called from the genus *Asclepias*, thus named in honour of *Esculapias*. The *Wild Cotton*, *Pleurisy-root*, &c., belong to this Order.

ASPERGIL'LIFORM, Bot., Lat., *aspergillus*, a brush used for sprinkling holy water in churches, and *forma*, shape. A term expressive of a form of inflorescence, chiefly applied to the stigmas of Grasses.

ASPHYX'IA, Hyg., Gr., α, priv., and σφυξις (*sphuxis*), pulse. Pulseless. A state of suspended animation from any cause—usually applied to that produced by foul air.

ASPIDOPH'ORA, Icth., Gr., ασπις (*aspis*), a buckler, and φορος (*phoros*), which carries. A group of Fishes, so called because they are covered with scales forming a sort of plate-armour.

ASSIMILA'TION, Phys., Lat., *ad*, to, and *similare*, to render like. The act by which living bodies convert nutritious matter into their own substance.

AS'TEROIDS, Ast., Gr., Αστρον (*Astron*), a Star, and ειδος (*eidos*), form. Star-like. A name applied by Herschell to Vesta, Juno, Ceres, and Pallas.

ASTRAG'ALUS, Anat., Gr., αστραγαλος (*astragalos*), a die. The first of the seven bones of the Tarsus; it articulates with the tibia forming the ankle; so called from a fancied resemblance to a die.

AS'TROITE, Rad., Gr., Αστρον (*Astron*), a Star. One of the Corals, so called from its stellate appearance.

ASTRON'OMY, Gr., Αστρον (*Astron*), a Star, and νομος (*nomos*), a law. That branch of Physics which investigates the laws of the heavenly bodies.

A'SYMPTOTES, Geom., Gr., α, priv., συν (*sun*), with, and πτοω (*ptoō*), I fall. Right lines which approach nearer and nearer to some curve, but which, if infinitely continued, would never meet.

ATHERIÇ'ERA, Ent., Gr., αθεριξ (*atherix*), met., the point of an arrow, &c. The fifth Family of dipterous Insects; so called because they are furnished with a long and *pointed* setaceous stilet or proboscis. It consists of genera which have, with one exception, no common name. The exception is in the *Gad-fly*, in which, however, the stilet is shorter than in others.

AT'LAS, Anat., Gr., Ατλας (*Atlas*), a King of Mauritania so called, who, according to the fable, supported the celestial Globe on his shoulders. His own name was formed from α aug., and τλαω (*tlaō*), to support. The first Vertebra of the neck, on which the head finds a fulcrum.

ATMOM'ETER, Nat. Ph., Gr., ατμος (*atmos*), vapour, and μετρον (*metron*), measure. An instrument contrived to measure the rate of evaporation from a humid surface.

AT'MOSPHERE, Chem., Gr., ατμος (*atmos*), vapour, and σφαιρα (*sphaira*), sphere. The air which surrounds the Earth. It consists of Oxygen, Nitrogen, and a trace of Carbon. Its pressure is equal to fifteen pounds to the square inch.

AT'OM, Nat. Ph., Gr., ατομον (*atomon*), a corpuscle, from α, priv., and τεμνω (*temnō*), to cut. A body considered to be so minute as to be no longer divisible.

ATOM'IC THE'ORY, Chem., Gr., ατομον (*atomon*), a corpuscle. A theory so called because it affirms that there is a limit to the divisibility of matter, and that, therefore, matter consists of ultimate particles which possess a certain absolute weight.

AT'ROPINE, Chem., Gr., Ατροπος (*Atropos*), one of the Parcæ, whose duty it was to cut the thread of life. A Vegeto-alkali, excessively poisonous, found in all parts of Atropa belladona, or Deadly Nightshade.

AT'ROPOUS, Bot., Gr., α, priv., and τρεπω (*trepō*), to turn. The ovules of Plants are so called when they are not curved or turned from their original direction—synonymous with *orthotropous*.

ATTEN'UATED, Mal., Lat., *attenuatus*, thin. A term applied to the valves of some of the testaceous Mollusca.

ATTRAC'TION, Ast., Lat., *ad*, to, and *trahere*, to draw. A principle of matter which causes bodies to draw towards each other.

AUDI'TION, Phys., Lat., *audire*, to hear. The function of hearing.

AULOSTOMA'TOUS, Icth., Gr., αυλος (*aulos*), a pipe, and στομα (*stoma*), a mouth. Pipe-mouthed. A term applied to Fishes, in which the jaws are lengthened out into a pipe.

AURANTIA'CEÆ, Bot., Lat., *Aurantium*, the Orange. A natural Order of Plants. It contains the *Orange*, *Lemon*, and *Lime*.

AUR'ICLE, Anat., Lat., *auris*, the ear. One of the two cavities of each side of the Heart; so called from a fancied resemblance to a dog's ear.

AURIC'ULATE, Bot. Lat., *auricula*, a little ear. Eared—furnished with two rounded ear-like lobes.

AUTOMAT'IC, Phys., Gr., αυτος (*autos*), self, and μαω (*maō*), to will. Self-acting.

AU'TOPSY, Anat., Gr., αυτος (*autos*), self, and οφις (*ophis*), vision. Seeing for one's self. A careful examination of any matter with one's own eyes is, in fact, an autopsy; it is restricted, however, by consent, to post mortem examinations of the body by dissection.

AUZOM'ETER, Opt., Gr., αυξω (*auxō*), I augment, and μετρον (*metron*), measure. An instrument for measuring the increased magnitude or diameter of bodies viewed through the microscope.

ARE'OLAR, Anat., Lat., *area*, a vacant space. A term applied to sponge-like tissues, having *areolæ* or vacant spaces between the fibres.

AX'IL, Bot., Lat., *axilla*, the arm-pit. The space between the upper part of the base of a leaf or branch, and the stem.

AXIL'LA, Anat., Lat., *axilla*, the arm-pit. The hollow beneath the shoulder-joint.

AX'ILLARY, Bot., Lat., *axilla*, the arm-pit. Growing in the axils.

AX'IS, Nat. Ph., Gr., αξων (*axōn*), a pivot. A right line passing through the centre of a body.

AZ'IMUTH, Ast., Ar., السمت (*alsemet*, or *azimuth*), the path or way. An arc of the horizon intercepted between the meridian and a vertical circle, passing through a Star or Planet.

AZ'OTE, Chem., Gr., α, priv., and ζωη (*zōe*), life. Nitrogen, A gas, so called because animals immersed in it die.

AZ'YGOUS, Anat., Gr., α, priv., and ζυγος (*zugos*), a pair. Odd. Without a fellow. A name applied to individual processes and muscles that have no corresponding one.

BAC'CATE, Bot., Lat., *bacca*, a berry. Fruits of Plants, so styled from their resemblance to berries.

BAC'ULITES, Mal., Lat., *baculum*, a stick. A group of fossil Shells, straight, but with sinuous partitions, differing in this from Orthocerites, q. v., and approaching the Ammonites.

BALAUS'TA, Bot., Lat., *balaustium*, flower of the Pomegranate. A Fruit with a coriaceous rind and irregular cells, with numerous drupaceous seeds in each.

BALSAMIF'LUÆ, Bot., Gr., βαλσαμον (*balsamon*), balsam. A natural Order of Plants. It contains but a single genus (Liquidambar) of three or four species. Our sweet Gum is one of them.

BA'RIUM, Chem., Gr., βαρος (*baros*), weight, heaviness. The metallic base of barytes, a white, silver-like Metal, fusible under a red heat.

BAROM'ETER, Chem., Gr., βαρος (*baros*), weight, and μετρον (*metron*), measure. A well-known instrument for measuring the weight of the air.

BAROSANEM'ETER, Nat. Ph., Gr., βαρος (*baros*), weight, ανεμος (*anemos*), wind, and μετρον (*metron*), measure. An instrument for determining the pressure of the wind.

BARY'TES, Chem., Gr., βαρος (*baros*), weight. An earth, so called from its weight found in several Minerals, chiefly in the heavy spar, or sulphate of barytes.

BARYTIN'EA, Min., Gr., βαρυτης (*barutes*), weight. The second Order of the second Class of Minerals, containing sparry Iron, Celestine, &c.

BASALT', Min., Lat., *basaltes*. A well-known igneous Rock composed of felspar and augite, usually found in regular columnar masses.

BASE, Mal., Gr., βασις (*basis*), the base, or support. In univalves, that part of the shell which is affixed to rocks. In multivalves, the extremity opposite to the apex.

BASE, Chem., Gr., βασις (*basis*), a base. The base of a compound.

BAS'ILAR, Bot., Anat., Gr., βασις (*basis*), base. A term applied by Anatomists to several parts of the structure which support others; a process of the occipital bone is so called.

BAS'SIC, Chem., Gr., βασις (*basis*), a base. Excess of the base of a compound. A term applied to Salts. Salts that contain more base than neutral Salts.

BATRACH'IA, Herp., Gr., Βατραχος (*Batrachos*), a Frog. Batrachians. The fourth Order of Reptiles.

BEAK, Mal., It., *becco*, beak, or bill. The pointed continuation of the body of univalves.

BELEMNI'TES, Geol., Gr., βελεμνον (*belemnon*), a dart. Chambered shells, only found fossil, probably belonging to the cephalopodous Mollusca. Very abundant in Chalk and compact Limestone.

BENZO'INE, Chem., see *Benzoin.* An isomeric compound of benzoyl, crystallizing in colourless, lustrous, inodorous, and tasteless prisms.

BENZOIN', Chem., Heb., בנימן (*Benjamin*), valuable. A resin obtained from the *Styrax benzoin.* Gum Benjamin.

BEN'ZOYL, Chem., see *Benzoin* and *Oil.* The hypothetical radical of a series of compounds including benzoic acid (whence the name) and the essential *oil* of bitter Almonds.

BERBERIDA'CEÆ, Bot., Lat., *Berberis*, the *Barberry.* A natural Order of Plants. It contains the common Barberry, Jeffersonia, Podophyllum, &c.

BETULA'CEÆ, Bot., *Betula*, the Birch. A natural Order of Plants. It contains the various Birches and Alders.

BIAN'GULATE, Mal., Lat., *bis*, twice, and *angulus*, an angle. A shell having two corners or angles.

BIBAS'SIC, Chem., see *Base*, and *bis*, two. A term applied to those Salts in which one atom of acid neutralizes two atoms of base.

BI'CEPS, Anat., Lat., *bis*, twice, or two, and *caput*, head. Two-headed. A word usually restricted to Muscles with a double origin.

BICIP'ITAL, Anat., Lat., *bis*, twice, or two, and *caput*, head. Relating to two heads, or two-headed muscles—ex., the bicipital groove of humerus.

BICUSPIDA'TI, Anat., Lat., *bis*, twice, and *cuspis*, a point. The specific appellation of the two anterior and pointed cheek-teeth of the human subject, situated directly posterior to the Cuspidatus, Canine, or Eye-tooth.

BIDAC'TYLE, Crust., Lat., *bis*, twice, and *dactylus*, finger. A term applied to those chelæ or claws of Lobsters, &c., which are true forceps, or pincers, having two opposing limbs.

BIEN'NIALS, Bot., Lat., *bis*, two, and *annualis*, yearly. A term applied to Plants that do not flower until the second year of their growth.

BI'FID, Bot., Lat., *befidus*, forked. Leaves so cleft as to present but two segments are bifid.

BIFO'LIATE, Bot., Lat., *bis*, two, and *folium*, leaf. With but two leaflets.

BIFO'RATE, Bot., Lat., *bis*, twice, and *foro*, I pierce. Having two perforations.

BIF'ORINES, Bot., Lat., *bis*, twice, and *foro*, I pierce. Oval sacs found in the parenchyme of certain leaves, apparently composed of two capsules, the external one open at each end—the internal filled with spiculæ. When placed in water, the internal sac contracts and ejects the spiculæ first from one end, and then the other. Their use is unknown.

BIFURCA'TION, Anat., *bis*, twice, or two, and *furca*, a fork. The division of the trunk of an artery, vein, &c., into two branches.

BIFUR'CATED, Bot., Lat., *bis*, twice, and *furca*, a fork. Forked.

BIGNONIA'CEÆ, Bot., *Bignon*, a Naturalist so named. A natural Order of Plants. An Order containing trees and climbers with beautiful flowers, such as the Trumpet-flower, Catalpa, &c.

BILAB'IATE, Bot., *bis*, two, and *labium*, lip. Two-lipped. Expressive of the form of the corolla of certain Flowers.

BILA'BIATE, Mal., Lat., *bis*, twice, or two, and *labiatus*, lipped. A Shell having an outer and an inner lip.

BI'LIN, Chem., Lat., *bilis*, bile. A translucent, colourless, inodorous matter, obtained from bile, that does not crystallize. It is decomposed bv acids into five different principles.

BIMA'NA, Mam., Lat., *bis*, twice, or two, and *manus*, a hand. Two-handed Animals. The first Order of the *Mammalia*, consisting of but one genus, Man.

BIMAR'GINATE, Mal., Lat., *bis*, twice, and *marginatus*, edged or bordered. Shells furnished with a double margin.

BI'NARY, Chem., Lat., *binarius*, double. A term applied by chemists to compounds of one element with another, as, for instance, oxygen with sodium in soda.

BIODYNAM'ICS, Phys., Gr., βιος (*bios*), life, and δυναμις (*dunamis*), power. Vital power. That branch of Physiology which treats of the vital forces.

BIOL'OGY, Phys., Gr., βιος (*bios*), life, and λογος (*logos*), a treatise. Synonymous with Physiology. That science which investigates the functions of the organs, &c.

BIOT'ICS, Phys., Gr., see *Biology*.

BI'PED, Zool., Lat., *bipes*, Gr., διπους (*dipous*), two-footed. An animal furnished with but two feet—Man, for instance.

BIPELTA'TA, Crust., Gr., δις (*dis*), two, and πελτη (*pelte*), a shield. With double shields. The second Family of the Stomapodous Crustacea; so called because the shell is divided into an anterior and posterior shield or piece.

BIPIN'NATE, Bot., Lat., *bis*, twice, and *pinnatus*, feathered. A compound pinnate leaf. See *Pinnate*.

BIRA'DIATE, Mal., Lat., *bis*, twice, *radiatus*, rayed. Shells having two rays.

BIS'MUTH, Chem., Lat., *Bismutum*. A Metal found in abundance in the silver and cobalt mines of Saxony, &c., in veins which accompany ores of Silver, &c. It is also found in one locality (Lane's mine, Conn.) in the United

States. The pure Metal is of a reddish white, and highly crystallizable.

BISSEX'TILE, Ast., Lat., *Bissextum*, leap-year. The 24th of February (6th Kalends of March) was reckoned *twice* every fourth year, which, for this reason, was called the *bissextum*, and the year itself the bissextile.

BIT'UMEN, Chem., Lat., *bitumen*, from the Gr., πιττα (*pitta*), pitch. A natural pitch or tar, the result of the action of a high temperature upon vegetable matter. It consists of three liquid compounds and one solid.

BI'VALVES, Mal., Lat., *bis*, twice, or two, and *valvæ*, literally, folding doors or shutters. Testaceous Mollusca furnished with two shells or valves, such as the Oyster, Clam, &c.

BLASTOCARP'OUS, Bot., Gr. βλαστος (*blastos*), a germ, and καρπος (*karpos*), a fruit. Applied to fruits, that of the Mangrove for example, which germinates inside the pericarp.

BOLE'TUS, Bot., Gr., βωλος (*bōlos*), a mass. A group of Fungi that spring from decayed trees in firm, fleshy masses. One species, the *B. igniarius*, when cut into thin slices, prepared with saltpetre, and dried, forms the spunk, or tinder, of the shops.

BORAGINA'CEÆ, Bot., Lat., *Borago*, Borage. A natural Order of Plants. It contains the Comfrey, Alkanet, Forget-me-not, Heliotrope, &c.

BO'RAX, Chem., Lat., *borax*. A Salt, borate of soda, found in a lake in Thibet, in the mines of Potosi, and in Ceylon.

BO'REAL, Ast., Gr., Βορεας (*Boreas*), the north-wind. Northern.

BO'RON, Chem., see *Borax*. An element obtained from boracic acid, in the form of a greenish-brown powder, which becomes hard, but has no metallic lustre.

BOT'ANY, Gr., βοτανη (*botane*), an herb. That branch of special Physics which investigates the structure, qualities and classification of Plants.

BOTRYOID'AL, Min., Bot., Gr., βοτρυς (*botrus*), a bunch of Grapes, and ειδος (*eidos*), form. Resembling a cluster of Grapes.

BOULD'ER, Geol., Ger., *bol*, rounded. A term applied by Geologists to a Formation consisting of fragments of rocks, some of enormous size, usually rounded, but sometimes angular. From the fact that, in many instances, these masses have been carried to the place of deposit, they are sometimes called *erratics*.

BRAC'CATE, Orn., Lat., *bracca*, breeches. A term applied to those Birds in which the feet are concealed by long feathers descending from the tibia.

BRACHELY'TRA, Ent., Gr., βραχυς (*brachus*), short, and ελυτρον (*elutron*), a sheath. Insects with short elytra, or wing cases. The second Family of the Coleoptera.

BRACH'IAL, Anat., Gr., βραχιων (*brachiōn*), arm. Relating to the arm, as the brachial plexus, &c.

BRACHIOP'ODA, Mal., Gr., βραχιων (*brachiōn*), an arm, and πους (*pous*), a foot.—The fifth Class of the Mollusca; so called because the three genera which compose it, instead of a foot, are furnished with long fleshy arms, which they can protrude from their bivalve shell. The fossil *Terebratalites* belong to this Class.

BRACHYPTERA'TÆ, Orn., Gr., βραχυς (*brachus*), short, and πτερον (*pteron*), a wing. The first Family of the sixth Order of Birds, in which the wings are so reduced that some of them never attempt to fly, but use them like little pebbles in the water—ex., *Penguins*.

BRACHYS'TOCHRONE, Nat. Ph., Gr., βραχιστος (*brachistos*), very short, and χρονος (*chronos*), time; that is, which is done in the shortest time. It is a curve synonymous with the *Cycloid*.

BRACHYU'RA, Crust., Gr., βραχυς (*brachus*), short, and ουρα (*oura*), tail. Short-tailed. A Tribe of decapodous Crustacea, so called from the shortness of their tail, or abdomen, properly so called. The common *Crab* is one of them.

BRACTS, Bot., Lat., *bractea*, a thin plate or leaf. Bracts are the leaves found on, or at the base of, flower-branches of Plants.

BRADYPOI'DES, Mam., Gr., βραδυς (*bradus*), slow, and πους (*pous*), foot. Slow-footed animals. A term applied to a group of mammiferous Animals, usually called *Sloths*, generically *Bradypus*.

BRAN'CHIÆ, Icth., Lat., *branchiæ*, gills. Organs of respiration, so called, which breathe air through the medium of water—ex., gills of Fishes, and some other Animals.

BRANCHIOS'TEGAL, Icth., Gr., βραγχια (*bragchia*), gills, and στεγω (*stegō*), I cover. A term formerly applied to a genus of Fishes—now restricted to a membrane which covers the respiratory arches, &c.

BRANCHIOP'ODA, Crust., Gr., βραγχια (*bragchia*), gills (the cartilages on which the vessels are placed, protruding like arms), and πους (*pous*), foot. Gill-footed. The first Order of the Crustacea.

BREC'CIA, Min., It., *breccia*. A rock composed of agglutinated angular fragments.

BREVIPENNA'TÆ, Orn., Lat., *brevis*, short, and *penna*, a wing. Name of the first Family of the Grallatoriæ, or wading Birds; so called from the shortness of their wings—ex., the Ostrich—a character in which they differ from all the rest of the Order, which have long wings and fly well.

BRO'MINE, Chem., Gr., βρωμος (*brōmos*), a stench. One of the fifth Class of Chemical elements. It is very volatile, and has a very offensive odour—found in Sea-water, &c.

BROMELIA'CEÆ, Bot., *Bromel*, a Swedish writer, to whom Linnæus dedicated the genus *Bromelia*. A natural Order of Plants, in which we find the *Pine-apple*, &c.

BRON'CHI, Anat., Gr., βρογχια (*brogchia*), branches of the trachea. Sub-divisions or ramifications of the Trachea or Windpipe, which convey air into the cells of the lungs.

BRU'CINE, or **BRU'CIA**, Chem., Lat., *Brucia*, Bruce, the generic name of the *B. antidysenterica*, in the bark of which it was first discovered. An Alkali closely resembling *strychnine* (q. v.) in all its properties, except that it is less poisonous.

BUCCINA'TOR, Anat., same, Lat., from Gr. βυκανιστης (*bukanistes*), a trumpeter. A Muscle so called, filling the space outside and between the two jaws, and is inserted into the angle of the mouth.

BUCCINOI'DA, Mal., Lat., *buccinum*, a trumpet, and Gr., ειδος (*eidos*), form. Trumpet-like shells. The third Family of the sixth Order of the Mollusca.

BUDS, Bot., Fr., *bout*, the tip, end, or point of any thing. Buds are individual Plants, which, in their development into branches, usually remain with the parent, and it is for this reason they will grow when separated from it.

BULB, Bot., Gr., βολβος (*bolbos*), a rounded root; so considered by the ancients—now known to be a subterranean *bud*—ex., the Onion, Tulip, &c.

BUL'LATE, Mal., Lat., *bulla*—Gr., φλυω (*phluō*), to boil—a bubble. Having a blistered appearance.

BUPRES'TIDES, Ent., Gr., Βους (*Bous*), Ox, and πρηθω (*prethō*), to inflame. Insects, so called by the Greeks, because it was supposed that the cattle that swallowed them in grazing died of inflammation produced by them. The first Tribe of the third Family of the Coleoptera.

BURMANIA'CEÆ, Bot., *Burman*, a Saxon Botanist. A natural Order of Plants.

BUR'SA, Anat., Gr., βυρσα (*bursa*), leather, because purses were usually made of leather. A little pouch or sac in the vicinity of the joints containing an oily fluid, which facilitates the motion of the tendons.

BYS'SOLITE, Min., Gr., βυσσος (*bussos*), flax, and λιθος (*lithos*), a stone. A fibrous Mineral found in the Alps.

BYS'SUS, Mal., βυσσος (*bussos*), fine flax. A curious production of certain bivalve Mollusca, such as the Pinna, resembling a tuft of long and flax-like fibres, by which they secure their shells to the rocks or sand, and ride by it as if by a cable.

CAC'ODYL, Chem., Gr., κακος (*kakos*), bad, and οδμη (*odme*), odour. The supposed compound radicle of the acetyl series. It is an ethereal fluid, of a nauseous odour, crystallizing in prisms, and igniting spontaneously in air and in chlorine gas.

CACTA'CEÆ, Bot., Gr., Κακτος (*Kaktos*), a Cactus. A natural Order of Plants; so called because all the genera which compose it bear a great resemblance to numerous species of Cactus. The *Opuntia*, or Prickly Pear, is one of them.

CAD'MIUM, Chem., Gr., καδμεια (*kadmeia*), *calanine.* A white Metal, resembling Tin, very ductile and malleable, obtained from the ores of Zinc.

CADU'COUS, Bot., Lat., *cado*, I fall. Falling early. A term applied to Plants that lose their leaves early.

CÆSPITO'SE, Bot., Lat., *cæspes*, a tuft of grass. Tufted.

CAFFE'IN, Chem., Ar., قهوه *Cahuah*, Coffee-tree. A neutral principle, one of the constituents of the horny seed of the Coffæa arabica, or Coffee. It crystallizes in snow-white needles, and it may be procured from *Tea*—it is not the *peculiar* principle of Coffee.

CAL'AMUS, Anat., Lat., *calamus*, a pen, or reed. The *calamus scriptorius*, or writing pen, is a small angular fossa at the superior extremity of the spinal marrow; so called because it is supposed to resemble a pen.

CAL'CARATE, Bot., Lat., *calcar*, a spur. Spurred.

CALCA'REOUS, Min., Mal., &c., Lat., *Calx*, Lime. Lime predominating in the body of a Mineral, Shell, &c.

CALCA'REOUS, Geol., Lat., *Calx*, Lime. One of the series of Aqueous rocks—Limestone, Chalk.

CALCED'ONY, Min., Gr., Καλχηδων (*Kalkedōn*), Chalcedonia. A beautiful variety of quartz, an Agate; so called because the first known specimens were found in the environs of the above-named city, in Bythnia.

CALCINA'TION, Chem., Lat., *Calx*, Lime, and *Cinis*, Ashes. The reduction of any substance to Ashes by means of heat.

CAL'CIUM, Chem., Lat. *Calx*, Lime. A silver-white and extremely oxidable Metal, forming the basis of Lime.

CALLION'YMOUS, Icth., Gr., καλος (*kalos*), beautiful, and ονομα (*onoma*), name. A term applied to the Uranoscopus, the ugliest of all Fishes.

CAL'LITHRIX, Mam., Gr., καλος (*kalos*), beautiful, and θριξ (*thrix*), hair. A term applied to a group of American Monkeys remarkable for the beautiful colour of their hair.

CALLITRICHA'CEÆ, Bot., Gr., καλος (*kalos*), beautiful, and τριχος (*trichos*), hair. A natural Order of Plants, consisting of Aquatic annuals.

CALOR'IC, Chem., Lat., *calor*, heat. The cause or principle which produces that effect we call heat—most probably an elementary body of a highly subtle nature.

CALOSO'MA, Ent., Gr., καλος (*kalos*), beautiful, and σωμα (*soma*), body. A group of Coleopterous Insects ornamented throughout with the most brilliant metallic colours.

CALYCANTHA'CEÆ, Bot., Gr., καλυξ (*kalux*), calyx or cup, and ανθος (*anthos*), flower; so called because the sepals of the calyx are coloured like petals. A natural Order of Plants. The Sweet-scented Shrub is one of them.

CALYC'ULATE, Bot., Gr., καλυξ (*kalux*), a cup or calyx. Flowers furnished with an *external* calyx are said to be calyculate.

CALYP'TRA, Bot., Gr., καλυπτω (*kaluptō*), I cover. A membranous hood which covers the *thecæ* in the Mosses.

CALYP'TRÆA, Mal., Gr., καλυπτρα (*kaluptra*), a covering. A group of gastropodous Mollusca covered with a patelliform shell, under which is a smaller conical one, or a semicircular process forming the commencement of a columella.

CA'LYX, Bot., Gr., καλυξ (*kalux*), a cup. The exterior row or whorl of floral envelopes, mostly leaf-like in texture.

CAM'BIUM, Bot., Lat., *cambium*, a change. A kind of mucilage found, at certain seasons, between the bark and wood of trees, which is converted into, or out of which are formed, the vessels and cells.

CAMEL'LIA, Bot., Sp., *Kamel*, a Spanish Jesuit. A group of beautiful ever-green Shrubs, belonging to the natural Order of the Ternstræmiaceæ, natives of China and Japan, and the ornament of our conservatories.

CAM'ERA LU'CIDA, Opt., Lat., *camera*, a chamber, and *lucida*, lighted. An instrument invented by Dr. Woolaston for copying drawings or delineating distant objects.

CAMPANULA'CEÆ, Bot., Lat., *campanula*, a little bell. Plants of which the corollas are bell-shaped or campanulate. A natural Order of Plants.

CAMPAN'ULATE, Bot., Lat.; *campanula*, a little bell. Bell-shaped.

CANALIC'ULATED, Anat., Lat., *canaliculatus*, grooved. A term applied to certain grooves found in bones.

CANALIF'ERA, Mal., Lat., *canalis*, a canal, and *fero*, I bear. Applied to a group of gasteropodous Mollusca, of which the shell has a long straight canal terminating near the mouth.

CAN'CELLATE, Bot., Lat., *cancelli*, lattice-work. A very rare sort of leaf, but of which specimens are presented in the *Hydrogeton fenestralis;* so called because the whole leaf consists of veins without any intervening *perenchyma*, the whole resembling what is called a skeleton leaf.

CAN'CELLATED, Mal., Lat., *cancellatus*, barred. Shells transversely and longitudinally ribbed.

CANCEL'LI, Anat., Lat., *cancellare*, to form lattice-work. The spongy tissue of Bones; so called because the fibres cross each other like lattice-work.

CANDES'CENT, Zool., Lat., *candescere*, to grow white. A term applied to the fur of Animals (or feathers of Birds, &c.) in which, whatever may be the colour of the stem of the hair, there is uniformly a white portion at or near the point, giving the whole a sort of frosted appearance.

CANES'CENT, Bot., Zool., Lat., *canescere*, to grow white. Covered with thickly set white hairs.

CANI'NE, Anat., *caninus*, relating to a Dog. Teeth so called, situated directly behind the incisors—now generally styled *Cuspidati*.

CANNA'CEÆ, Bot., Heb., קנה (*Kane*), a Reed. A natural Order of Plants. The Arrow-root, *Maranta arundinacea*, is one of them.

CAN'THUS, Anat., Gr., κανθος (*kanthos*), corner of the eye. The angle of the eye.

CAP'ILLARY, Anat., &c., Lat., *capillus*, a hair. A word applied to a system of vessels as fine as hairs—the extreme branches of the arteries and the radicles of the veins, and to any vessel of a similar size. In Nat. Ph. it designates a peculiar sort of attraction, depending on an attraction between the particles of solids and those of fluids, often much greater than that between the particles of the fluid itself. It was called capillary, because it was erroneously supposed that it would act, only, in tubes approaching a hair in size.

CAP'ITATE, Bot., *caput*, a head. Flowers growing in masses like heads.

CAPIT'ULUM, Bot., Lat., same word, dimin., of *caput*, a head. A term applied to sessile Flowers growing in numbers on a short axis from a single peduncle, forming a sort of head.

CAPIT'ULUM, Anat., Lat., *caput*, the head. A little head. A name given to each of the cartilages placed on the arytenoid cartilages of the larynx, viz., the *Capituli Santorini*.

CAP'NOMOR, Chem., Gr., καπνος (*kapnos*), smoke, and μοιρα (*moira*), part. An oily substance of a penetrating, but not disagreeable, odour obtained from wood-tar.

CAPPARIDA'CEÆ, Bot., Gr., Καππαρις (*Kapparis*), the Caper, both plant and fruit. A natural Order of Plants.

CAPRIFOLIA'CEÆ, Bot., Lat., *Caprifolium*, the Honeysuckle. A natural Order of Plants. It contains not only the Honeysuckles (Lonicera), but the Elder, Viburnum, &c.

CAPRO'IC, Chem., Lat., *Capra*, a Goat. An acid of a Goat-like odour that is formed by the saponification of Butter.

CAP'SULE, Anat., Gr., καψα (*kapsa*), a sheath, or case. A membranous sac. Variously applied by Anatomists.

CAP'SULE, Bot., Gr., καπσα (*kapsa*), a box. All dry and dehiscent Fruits are capsules, containing their seeds, as in a box or case.

CAP'SULAR, Anat., Gr., καψα (*kapsa*), sheath-like. This word is chiefly applied to ligaments resembling a sac open at both ends, which surrounds the joint.

CAR'BON, Chem., Lat., *Carbo*, Charcoal, from the Gr., καρφω (*karphō*), to dry. A dimorphous and universally distributed substance in the Animal, Vegetable, and Mineral kingdoms. It forms the basis of Coal, and, when pure and crystallized, constitutes the Diamond.

CARBONIF'EROUS, Geol., Lat., *Carbo*, Coal, and *ferre*, to bear. A term applied to the Coal measures, or strata containing Coal.

CAR'DIAC, Anat., Gr., καρδια (*kardia*), heart. An orifice of the stomach, so called from its vicinity to the heart. It is also applied to various organs in the region of the heart, as the *cardiac plexus*, &c.

CARDIA'CEA, Mal., Lat., *Cardium*, the Cockle-shell. A Family of beautiful species of bivalve Mollusca.

CAR'DINAL, Ast., &c., *cardo*, a hinge. A term implying superiority, or importance, as the cardinal points of the compass, N., S., E. and W. In *Malacology*, the principal tooth of the hinge.

CAR'INATED, Anat., Zool., &c., Lat., *carina*, a keel. Keel-shaped. A word expressive of the form of various processes of bones and parts of Insects, Reptiles, &c., which project like the keel of a ship from the hull.

CARNA'RIA, Mamm., Lat., *carnarius*, fond of flesh. The third Order of the Mammalia, containing the [redacted] flesh-eaters, such as the Mole, &c.

CARNIV'ORA, Mamm., Lat., *carnivorus*, a devourer of flesh. Cuvier, in his "Règne Animal," or Animal Kingdom, calls the third *Order* of the carnivorous Mammalia the *Carnassiers*, which, on the authority of Martial, in my English edition of the same work, I have rendered by *Carnaria*. The *Carnivora* form the third *Family* of this Order—it includes the more ferocious and powerful Carnaria, such as the Lion, Tiger, &c.

cass is a jackass

CARNO'SI, Rad., Lat., *carnosus*, fleshy, plump. The first Order of Polypi, or of the second Class of radiated Animals.

CAROT'ID, Anat., Gr., καρος (*karos*), stupor. The name of the great Arteries that supply the head; so called by the ancients, because they supposed the seat of stupor was in these vessels.

CAR'PEL, Bot., Gr., καρπος (*karpos*), fruit. A pistil—each simple pistil is so called. See *Pistil.*

CARP'OPHORE, Bot., Gr., καρπος (*karpos*), fruit, and φερω (*pherō*), to carry. The slender central axis which supports the Achenia.

CARP'OLITES, Bot., Gr., καρπος (*karpos*), fruit, and λιθος (*lithos*), stone. A term used by Palæontologists in speaking of fossil Fruits and Seeds.

CAR'PUS, Anat., Gr., καρπος (*karpos*), the wrist. An assemblage of eight bones forming the wrist.

CART'ILAGE, Anat., Lat., *cartilago.* A shining, white, elastic solid of the Animal body; penetrated by earthy matters, it becomes Bone.

CAR'UNCLE, Anat., Lat., *caro*, flesh. A little fleshy excrescence. Usually applied to a small fellicular organ in the internal canthus of the eye, the *caruncula lachrymalis.*

CARYOPHYLLA'CEOUS, Bot., Gr., Καρυοφυλλον (*Karuophullon*,) a Clove. Clove-like. Certain Flowers with five petals, of which the long and narrow claws are enclosed in the tube of the calyx, giving them somewhat the form of a Clove—ex., the Pink.

CARYOP'SIS, Bot., Gr., καρυον (*karuon*), a nut, and οψις (*opsis*), resemblance. An indehiscent, one-celled Fruit, with a membranous pericarp that adheres firmly to the seed. A grain of Corn is a caryopsis.

CA'SEIN, Chem., Lat., *Caseum*, Cheese. Curd. One of the organic principles found in Milk.

CASSIDI'DÆ, Ent., Lat., *cassis*, a helmet. A Family of tetramerous Coleoptera; so called because the margin of the thorax is so dilated as to form a sort of helmet to the head beneath. They are commonly called Tortoise-Beetles.

CATADIOP'TRICS, Opt., see *Catoprics*, and *Dioptrics*. That branch of Optics which considers the united effects of the reflection and refraction of light.

CAT'ACLYSM, Geol., Gr., κατακλυσμος (*kataklusmos*), an inundation. A deluge.

CATACOUS'TICS, Ac., Gr., κατα (*kata*), against, or contrary, and ακουω (*akouō*), I hear. That branch of Acoustics which investigates the nature and laws of reflected sound, or an echo.

CATAL'YSIS, Chem., Gr., κατα (*kata*), down, and λυω (*luō*), to loosen. Decomposition by contact. The action of the catalytic power which resolves other bodies than those in which it exists into new compounds by the simple action of presence, or without gaining or losing any thing itself.

CATALYT'IC, Chem., see *Catalysis*.

CATAPHO'NICS, Ac., Gr., κατα (*kata*), against, and φωνη (*phōne*), sound. That branch of Acoustics which treats of reflected sounds, or echoes.

CATEN'ULATE, Nat. Hist., Lat., *catena*, a chain. Applied to any surface marked by lines of interrupted oblong elevations resembling a chain.

CAT'ODON, Icth., Gr., κατω (*katō*), beneath, and οδους (*odous*), tooth. A group of Fishes; so styled because their under jaw, only, is furnished with teeth.

CATOP'TRICS, Opt., Gr., κατοπτρον (*katoptron*), a mirror. That branch of Optics which treats of the reflection of light.

CAUCA'SIAN, Mam., Lat., *caucaseus*, relating to Caucasus. The first, in all respects, of the three well-marked races of Man; so called from its supposed origin in the vicinity of Mount Caucasus.

CAU'DA, Mal., Lat., *cauda*, a tail. The elongated base of the lip and columella of a Shell.

CAU'DAL, Anat., Zool., &c., Lat., *cauda*, a tail. Relating to the tail, as the caudal vertebræ.

CAU'DATE, Bot., Lat., *caudatus*, with a tail. Furnished with a tail-like appendage.

CAUL'INE, Lat., Bot., *caulis*, a stem. Leaves, so called, because they rise from the main stem of a Plant, and not from the branches.

CAULOCARP'OUS, Bot., Gr., καυλος (*kaulos*), a stem, and καρπος (*karpos*), fruit. A term applied by De Candolle to those Trees which annually produce flowers and fruit on their branches without perishing.

CAUS'TIC, Geom., Opt., Gr., καυστικος (*kaustikos*), from καιω (*kaiō*), I burn. Curves, so called in Optics, on which reflected or refracted rays of light cut each other. They are either *catacaustic* or *diacaustic.*

CAV'ICORNS, Mam., Lat., *cavus*, hollow, and *cornu*, horn. A term applied to that section of the Ruminantia, of which the genera have hollow horns, such as the Antelope, Sheep, &c.

CEDRELA'CEÆ, Bot., Κεδρος (*Kedros*), a Cedar-tree. A natural Order of Plants. It includes many valuable species, such as the Mahogany, Satin-wood, &c.

CELASTRA'CEÆ, Bot., Lat., *Celastrus*, Bitter-sweet. A natural Order of Plants. The Euonymus or Burning Bush, Bladder-Nut, &c., belong to this Order.

CEL'LULAR, Bot., Lat., *cellula*, a little cell. This term is very expressive of the structure of one great primary division of Plants, consisting, as all of them do, of cells, or cellular tissue—no vessels whatever being found in them.

CELLULA'RIA, Rad., Lat., *cellularius*, cellular, or relating to a cell. The second Family of the coralline Polypi; so called because they inhabit little calcareous or horny cells.

CENT'IGRAMME, Chem., Lat., *centum*, a hundred, and Gr., γραμμα (*gramma*), an ancient weight equal to a scruple avoirdupois. The hundredth part of a gramme.

CENT'ILITRE, Chem., Lat., *centum*, a hundred, and Gr., λιτρα (*litra*), a litre, an ancient measure for fluids holding about sixteen ounces. The hundredth part of a litre, or about a spoonful.

CENT'IMETRE, Chem., Lat., *centum*, a hundred, and Gr., μετρον (*metron*), a measure. The hundredth part of a metre, or about four lines.

CEN'TRE, Geom., Gr., κεντρον (*kentron*), a point. The point about which the periphery of a circle is described.

CENTRIF'UGAL, Ast., Gr., κεντρον (*kentron*), centre, and φευγω (*pheugō*), to fly from. That power by which bodies moving about a centre are driven off at a tangent.

CENTRIP'ETAL, Ast., Gr., κεντρον (*kentron*), centre, and ποθω (*pōthō*), I desire. A power, so called, by which a body in motion around another is driven towards it.

CENTRIS'CUS, Icth., Gr., κεντρις (*kentris*), a sting. A group of chondropterygious Fishes, so called, because the first dorsal fin has four aculeated rays.

CENTROBAR'IC, Nat. Ph., Gr., κεντρον (*kentron*), centre, and βαρος (*baros*), gravity or weight. A method, so called in Mechanics, of determining the measure of the extent by the movement of centres of gravity.

CEPHAL'IC, Anat., Gr., κεφαλη (*kephale*), the head. Relating to the head, as the cephalic veins, &c.

CEPH'ALOID, Nat. His., Bot., Gr., κεφαλη (*kephale*), head, and ειδος (*eidos*), form. A term applied to various objects resembling the head. In Botany, to those Plants which terminate in a compact and rounded mass of foliage.

CEPHALOP'ODA, Mal., Gr., κεφαλη (*kephale*), head, and πους (*pous*), foot. Head-footed. The first Class of the Mollusca, consisting of the Sepiæ, or Cuttle-fishes, &c.

CE'RA, or **CERE**, Orn., Lat., *cera*, wax, or Gr., κερας (*keras*), horn. The naked and usually coloured strip of skin at the base of the bill of certain Birds, such as the Falcons.

CERATIN'EA, Min., κερας (*keras*), horn. The third Order of the second Class of Minerals, consisting of Horn-silver and some other species of the genus Ceratus.

CE'RATOID, Anat., Gr., κερας (*keras*), horn, and ειδος (*eidos*), shape. Horn-like. Among the Greeks, this word was used for the *cornea* of the eye.

CEROTOPHYLLA'CEÆ, Bot., Gr., κερας (*keras*), horn, and φυλλον (*phullon*), leaf. A natural Order of Plants; so called from the horn-like form of the leaves of the only genus composing it, the *Ceratophyllum*.

CERAT'OPHYTES, Rad., Gr., κερας (*keras*), a horn, and φυτον (*phuton*), plant. A term applied to a group of corticiferous Polypi, of which the axis resembles horn or wood.

CERCA'RIÆ, Zool., Gr., κερκος (*kerkos*), a tail. A Family of infusory Animalcula, with an inflated body terminating in a long, slender, tail-like appendage.

CERCOPITH'ECUS, Mam., Gr., κερκος (*kerkos*), tail, and Πιθηκος (*Pithekos*), Monkey. A term applied to any Monkey with a long tail—now, however, restricted to a few species.

CEREA'LIA, Bot., Hyg., Lat., *Ceres*, the Goddess of the harvests. A general appellation for all Plants producing grain convertible into bread, as Wheat, Rye, &c.

CEREBEL'LUM, Anat., Lat., dim., of *cerebrum*, the brain. The little brain or cerebellum.

CER'EBRUM, Anat., Lat., same word. The brain.

CE'RIUM, Chem., Lat., *Ceres*, the Goddess of harvests. A Metal obtained by Berzelius from Minerals, all from Sweden and Greenland.

CEROI'DAL, Min., Gr. κηρος (*keros*), wax, and ειδος (*eidos*), aspect. Resembling yellow wax.

CERU'MINOUS, Anat., Lat., *cera*, wax. Glands, so called because they secrete a wax-like fluid. They are situated at the opening of the external auditory meatus—the *glandulæ ceruminosæ*.

CER'VIX, Anat. Lat., *cervix*, the neck. A term frequently applied to parts of bones and other organs.

CESTOI'DEA, Rad., Gr., Κεστος (*kestos*), a zone or girdle, and ειδος (*eidos*), form. The fourth Family of the second Order of Radiated Animals; so called because they resemble a riband or girdle.

CETA'CEA, Mam., Gr., Κητος (*Ketos*), a Whale, or of the Whale kind. The ninth and last order of the Mammalia, including the Porpoise, Grampus, Whale, &c.

CETOL'OGY, Mam., Gr., Κητος (*Ketos*), Whale, and λογος (*logos*), a treatise. That branch of Zoology which treats of the cetaceous Mammalia in general.

CHALA'ZA, Bot., χαλαζα (*chalaza*), a pimple or knob. A granule forming the point of union between the *ovule* and *nucleus* of a Plant.

CHAL'CIS, Ent., Gr., Χαλκος (*Chalkos*), Brass. A group of dipterous Insects; so called from being marked with yellow spots.

CHALICIN'EA, Min., Gr., Χαλιξ (*Chalix*), Silex. The fifth Order of the second Class of Minerals, composed of Mica, Brewstreite, &c.

CHAMÆLEON'IDA, Herp., Gr., Χαμαιλεων (*Chamaileōn*), literally, a little Lion, and ειδος (*eidos*), form. Why the Chamelions should be considered little Lions, it is difficult to say; but such are the roots of the word. The fifth Order of the *Saurians*, or Lizards.

CHARA'CEÆ, Bot., Lat., *Chara*, the plant still known under that name. A natural Order of Plants, consisting of submerged aquatics, such as the *Chara* and *Nitella.*

CHEI'RONECTS, Icth., Gr., χειρ (*cheir*), hand, and νηχω (*nechō*), I swim. A group of Fishes having the pectoral fins supported, like feet, on short peduncles. In consequence of this, they can crawl about. *Frog-fishes* is their vulgar name.

CHEIROP'TERA, Mam., Gr., χειρ (*cheir*), hand, and πτερον (*pteron*), a wing. Wing-handed. The first Family of the Carnaria, where the arms are converted into wings—ex., the Bat.

CHE'LÆ, Crust., Lat., *chelæ*, the pincer-like claws of the Lobster. They are either *monodactyle* or *bidactyle*, which see.

CHEL'ICERS, Ent., Gr., χηλη (*chele*), pincers, and κερας (*keras*), horn. A term invented by Latreille, and applied to certain appendages to the head of the Scorpion, Spider, &c., which, in form, resemble the chelæ of the Lobster. They are organs of manducation.

CHELO'NIA, Herp., Gr., Χελωνη, (*Chelōne*), a Tortoise, whence χελωνιος (*chelōnios*), relating to a Tortoise. Cheloniens, or Tortoises. The first Order of Reptiles.

CHEM'ISTRY, Gr., χυμος (*chumos*), juice, Gr., χεω (*cheō*), to melt, Ar., كيميا (*kimiya*), fraud, deceit. Such are the various etymologies of this word, the χειμεια (*cheimeia*), of the Greeks. That science which by actual experiment ascertains the composition, affinities, and other qualities of all bodies.

CHENOPODIA'CEÆ, Bot., Gr., Χην (*Chen*), a Goose, and πους (*pous*), a foot; so called from the supposed resemblance of the leaves of Chenopodium to the foot of a Goose. A natural Order of Plants. It includes the Spinach, Beet, &c.

CHERSY'DROUS, Herp., Gr., χερσος (*chersos*), earth, and ὑδωρ (*hudōr*), water. A term applied to certain Reptiles that inhabit land and water.

CHILIOGNA'THA, Ent., Gr., χειλος (*cheilos*), lip, and γναθος (*gnathos*), a jaw. The first Family of the Myriapoda; so called because the two mandibles and the tongue form a large lower lip. It contains the Centipedes.

CHILOP'ODA, Ent., Gr., χειλος (*cheilos*), lip, and πους (*pous*), foot. An order of the Myriapoda, so called, because the lower lip is formed by a pair of feet.

CHI'TONS, Mal., Gr., χιτων (*chitōn*), a garment. A group of gasteropodous Mollusca, so called, because they have a series of testaceous and symmetrical plates crossing the mantle above, and forming a sort of coat of mail.

CHLORACET'IC, Chem., Gr., χλωρος (*chlōros*), greenish, and Lat., *acetum*, vinegar. A remarkable acid obtained by the action of chlorine gas on the hydrate of acetic acid. It crystallizes in rhomboidal plates of colourless needles, but deliquesces rapidly.

CHLO'RINE, Chem., Gr., χλωρος (*chloros*), greenish. A simple or elementary gaseous substance discovered by Scheele in 1774. It received its name from Davy on account of its yellowish-green colour. It is very abundantly distributed, and exists in table-salt combined with sodium.

CHLO'RATES, Chem., Gr., χλωρος (*chlōros*), green, or chlorine, and *ate*, termination signifying a salt, or compound of the second Order. Salts of chloric acid.

CHLO'RIDES, Chem., Gr., χλωρος (*chlōros*), chlorine, and *ide*, a termination expressive of combination. Combinations of chlorine with Metals.

CHLORIM'ETRY, Chem., Gr., χλωρος (*chlōros*), chlorine, and μετρον (*metron*), a measure. The art of ascertaining the quantity of chlorine in any combination.

CHLO'ROID, Chem., Gr., χλωρος (*chlōros*), chlorine, and ειδος (*eidos*), like. Like chlorine. A term applied to the chlorous plate of the voltaic battery when used as an instrument of decomposition. The other terminal plates are similarly distinguished.

CHO'LECYST, Anat., Gr., χολη (*chole*), bile, and κυστις (*kustis*), bladder. The gall-bladder.

CHOLEDO'CHUS, Anat., Gr., χολη (*chole*), bile, and δοχος (*dochos*,) containing. The common duct of the gall-bladder and liver, which conducts the bile into the duodenum.

CHOLES'TERIN, Chem., Gr., χολη (*chole*), bile, and στερεος (*stereos*), solid. A solid or crystallizable substance obtained from bile.

CHO'LIC, Chem., Gr., χολη (*chole*), bile. An acid obtained from bile ; it crystallizes in fine needles.

CHON'DRIN, Chem., Gr., χονδρος (*chondros*), cartilage. A variety of gelatin obtained from the permanent cartilages.

CHONDROL'OGY, Anat., χονδρος (*chondros*), cartilage, and λογος (*logos*), a discourse. That branch of Anatomy which treats of the cartilages.

CHONDROPTERYG'IENS, Icth., Gr., χονδρος (*chondros*), cartilage, and πτερυξ (*pterux*), a fin. Cartilage-finned Fishes. The second great section of the Class of Fishes, the Chondropterygii, so styled. Not merely because the *bony* rays found in the fins of the first section are wanting, but from the fact that the whole skeleton is essentially cartilaginous. The Sturgeon is one of them.

CHORD, Ast., Gr., χορδη (*chorde*), a cord. The chord of a circle is a right line drawn across that circle dividing it unequally, and joining the two extremities of the arc.

CHO'ROID, Anat., Gr., χοριον (*chorion*), an envelope, and ειδος (*eidos*), form. The second tunic or coat of the eye-ball.

CHROMAT'ICS, Opt., Gr., χρωμα (*chrōma*), colour. That branch of Optics which treats of the decomposition of light and its resolution into its primitive colours.

CHRO'MIUM, Chem., Gr., χρωμα (*chrōma*), colour. A grayish-white Metal discovered in 1797 by Vauquelin in chromate of lead, since found in other Minerals, and so called from the beauty and variety of colour exhibited by its preparations.

CHROM'ULE, Bot., Gr., χρωμα (*chroma*), colour. Green globules of matter contained in the parenchyma of the leaf of a Plant, and which give it colour.

CHRYS'ALIS, Ent., Gr., χρυσος (*chrusos*), gold. One of the stages of the existence of the diurnal lepidopterous Insects, in which they are enclosed in a case very often beautifully ornamented with gold-like spots, whence the name.

CHRYS'OLITE, Min., Gr., χρυσος (*chrusos*), gold, and λιθος (*lithos*), a stone. Gold-stone. A precious stone, transparent and of a golden-yellowish colour tinged with green, highly valued by the ancients. Said to be the Topaz of the moderns.

CHYAZ'IC, Chem. An acid, so called and derived from the initial letters of carbon, hydrogen, and azote. A term applied to the compounds of hydrocyanic acid.

CHYLE, Phys., Gr., χυμος (*chumos*), juice. A milk-white fluid found in the lacteals, the result of digestion.

CHYLIFICA'TION, Phys., Gr., χυλος (*chulos*), chyle, and Lat., *facio*, I make. The formation of chyle.

CHYLOPOIET'IC, Phys., Gr., χυλος (*chulos*), chyle, and ποιεω (*poieō*), I make. A term applied to all the organs concerned in the production of chyle. Thus the duodenum, liver, pancreas, &c., are called chylopoietic viscera.

CHYME, Anat., χυμος (*chumos*), juice. A grayish, homogeneous pulp, formed in the stomach by the solution of food in its juices.

CICADA'RIA, Ent., Lat., *Cicada*, a Locust. The first Family of hemipterous Insects.

CIC'ATRIX, Mal., Lat., *cicatrix*, a scar. The smooth fossa on the internal face of a shell to which the muscles are attached.

CIL'IA, Anat., Lat., *cilium*, an eye-lash. The term ciliary is applied to various parts of the eye not connected with the lashes, such as the *ciliary ligament*, *ciliary processes*, &c.

CIL'IATE, Bot., Lat., *cilia*, an eye-lash. Fringed with fine hairs. A term applied to leaves margined with filaments.

CIL'IATE, Mal., Etym., as above. Shells edged with parallel hairs, or setæ, resembling eye-lashes.

CINE'REOUS, Nat. Hist., Lat., *cinis*, ashes. Gray, or ash-coloured.

CINETH'MICS, Nat. Ph., Gr., κινηθμος (*kinethmos*), motion. That branch of Nat. Ph. which treats of motion in general.

CIR'CINATE, Bot., Lat., *circinatus*, round or rounded. One of the forms of prefoliation—that in which, as in the Sundew, the leaf is rolled up from the apex downwards.

CIR'CLE, Ast., &c., Gr., κρικος (*krikos*), a ring. A plain figure bounded by a curve equidistant from the central point. All circles contain 360 degrees, each degree 60 minutes, and each minute 60 seconds.

CIRCULA'TION, Phys., Lat., *circum*, about, and *ferre*, to carry. A term applied to the motion of the blood which describes one or more circles—here it is simple, then double, &c. In Man there are three circles—the aortic, pulmonary, and portal.

CIRCUMDUC'TION, Anat., Lat., *circumduco*, I lead round. One of the five motions of the spine—that in which the trunk describes a cone, the apex being at the first lumbar vertebra.

CIRCUM'FERENCE, Geom., Lat., *circumfero*, I carry round. The line or boundary which contains a circle—the line itself is also so called.

CIRCUMSCIS'SILE, Bot., Lat., *circumscindo*, to cut or tear a body through its circumference. A peculiar mode of dehiscence, where the opening extends only half way round the pericarp.

CIR'RI, Zool., Lat., *cirri*, fringe. A term expressive of the ciliated appearance of various organs in certain Insects, Crustacea, Radiata, &c. They are themselves organs of different functions.

CIR'RHOUS, Bot., Lat., *cirri*, fringes, or *cirra*, curled hair. Furnished with tendrils, like the vine.

CIS'SOID, Geom., Gr., Κισσος (*Kissos*), Ivy, and ειδος (*eidos*), form. A curved line, so called because, in approaching its asymptote, it forms the curve of an Ivy leaf.

CISTA'CEÆ, Bot., Gr., Κιστος (*Kistos*), the Ladanum plant, so called from a gum which exudes from it. A natural Order of Plants.

CI'TRATES, Chem., Lat., *Citrus*, the Lemon, and *ate*, termination signifying a salt. Salts of citric acid.

CLASS, Nat. Hist., Gr., κλασις (*klasis*), a class. The first subdivision of any peculiar form of structure. The *vertebrated*, for instance, is the first of the four forms of structure visible in the Animal kingdom, and the *Mammalia*, its first subdivision or Class.

CLA'VATE, Ent., Bot., Lat., *clava*, a club. Club-shaped.

CLAVICOR'NUA, Ent., Lat., *clava*, a club, and *cornu*, a horn. The fourth Family of coleopterous Insects, or Clavicorns; so styled because their antennæ—horns—are club-like.

CLAV'ICLE, Anat., Gr., κλεις (*kleis*), a key. The collar-bone; so called because the two clavicles act as a key to the scapulæ and upper part of the thorax.

CLAVIPAL'PI, Ent., Lat., *clava*, a club, and *palpo*, I touch Insects with club-shaped palpi—see *Palpi*—composing the seventh Family of coleopterous Insects.

CLEAV'AGE, Min., Dut., *klieven*, to split. A term applied in Mineralogy to the line of direction in which parts of Minerals may easily be separated from each other, and which are called their natural joints.

CLI'MATE, Hyg., &c., Gr., κλιμα (*klima*), a region. As used in Hygiene, a region which differs from another in temperature, soil, &c. In Geography, a space comprised between any two circles parallel to the equator.

CLIN'IUM, Bot., Gr., κλινη (*kline*), a bed. See *Torus.*

CLI'NOID, Anat., Gr., κλινη (*kline*), a bed, and ειδος (*eidos*), form. Four knob-like processes of the sphenoidal bone; so called from their resemblance to bed-posts.

CLINOM'ETER, Geol., Gr., κλινω (*klinō*), to incline, and μετρον, a measure. An instrument used for determining the angle of inclination formed by beds or strata of Rocks —a *Goniometer.*

CLU'PEÆ, Icth., Lat., *Clupea*, a Herring. Herring-like Fishes. The fifth Family of the second Order of malacopterygious Fishes.

CLYP'EUS, Ent., Lat., *clypeum*—Gr., καλυπτω (*kaluptō*), to protect—a buckler. A term applied by Kirby to what may be called the nose of Insects. See *Epistoma.*

CO'BALT, Chem., Goth., *Kobold*, a Goblin. A brittle Metal of a reddish-gray colour, usually found in combination with arsenic. The name is derived from the ideas of the ignorant miners of the middle ages, who imagined that the evil spirits of the mines, the *Kobolds*, prevented their obtaining the precious metals from the ore, or put this in their place. It is now extensively employed as a blue pigment for various purposes.

COC'CUS, Bot., Gr., κοκκος (*kokkos*), a grain. Carpels are so called when, though separated from each other, they remain closed, as in the Mallow.

COC'CYX, Anat., Gr., Κοκκυξ (*Kokkux*), a Cuckoo. The three small caudal vertebræ, so called from a supposed resemblance in form to the bill of a Cuckoo.

COCH'LEA, Anat., Gr., Κοχλιας (*Kochlias*), a Snail. A portion of the labyrinth, or internal ear; so called from its resembling the shell of a Snail.

COCH'LEÆ, Mal., lat., *Cochlea*, a Snail. Univalves, or shells, all in one valve, or piece, like that of the Snail.

COCH'LEATE, Mal., same etym. Twisted like the shell of a Snail.

COC'TION, Hyg., Lat., *coquere*, to boil. The dressing of food in any way—cooking.

CODE'INE, Chem., Gr., Κωδια (*Kodia*), a Poppy-head. An alkaline substance obtained from opium.

CŒ'CUM, Anat., Lat., *cæcus*, blind. The lower end of the colon or large intestine ; so called because it forms a cul-de-sac, or has no opening inferiorly. There is a foramen, also, so called.

CŒ'LIAC, Anat., Gr., κοιλα (*koila*), the abdomen. A term applied to an artery, &c., of the abdomen.

COLEOP'TERA, Ent., Gr., κολεος (*koleos*), a sheath or case, and πτερον (*pteron*), a wing. Wing-cased. The fifth Order of the Class of Insects, consisting of what are commonly called *Beetles*.

COLEORHI'ZA, Bot., Gr., κολεος (*koleos*), a sheath, and ῥιζα (*rhiza*), a root. A root-sheath, in which the radicle is enclosed. It is only found in Endogenous Plants.

COLLIMA'TION, Ast., Lat., *collimo*, I aim at. The straight line in a telescope, or a line passing through the centre of the object-glass and the intersection of the wires placed in its focus.

COLLIMA'TOR, Ast., see *Collimation*. An instrument for the purpose of determining the horizontal point.

CO'LON, Anat., Gr., κωλον (*kōlon*), from κωλυω (*kōluō*), I retard, or κοιλον (*koilon*), hollow. The large intestine.

COLUM'BIUM, Chem., *Columbite*, from Columbia, America. This metal is the same as *Tantalum*, and is obtained from the mineral called Columbite, and Tantatlite. A gray Metal but slightly touched by acids, and forming columbic acid when fused with the hydrate of potash.

COLUMEL'LA, Mal., Lat., *columella*, a little pillar. An upright pillar, forming the axis of most of the univalves.

COLUM'NÆ CAR'NEÆ, Anat., Lat., *columna*, a pillar, and *caro*, flesh. Conoidal muscles found in the ventricles of the heart.

COLU'RES, Ast., Gr., κολος (*kolos*), cut off, and ουρα (*oura*), a tail. Without a tail, because never seen above the horizon. The colures are two great circles called the equinoctial and solstitial, which intersect each other at right angles in the poles of the earth, dividing the ecliptic into four equal parts representing the four seasons.

CO'MA, Bot., Gr., κομα (*koma*), hair. The tuft of fine hairs attached to certain seeds, in place of the *ala*, or wing, of others, by which they are wafted about, and the species disseminated.

COMBRETA'CEÆ, Bot., Lat., *Combretum*, a plant so called by the Latins. A natural Order of Plants.

COM'ET, Ast., Gr., κομητης (*kometes*), hairy. A celestial body moving in a very eccentric orbit; so called from a vapour-like appendage compared to a hairy tail.

COMMELYNA'CEÆ, Bot., *Commelyn*, a Flemish Botanist. A natural Order of Plants.

COMMIS'SURE, Anat., Lat., *commissura*, junction. A term applied to the line of union between any two parts, as the eye-lids, the hemispheres of the brain, &c.

COMPOS'ITÆ, Bot., Lat., *compositus*, compounded. A natural Order of Plants. The compound flowers of the older Botanists—those in which the flowers form a capitulum or head, such as the Helianthus, or Sun-flower.

COM'POUND LEAVES, Bot., Lat., *compositus*, compound. Leaves in which the petiole, or leaf-stalk, is branched, each branch forming a leaflet—ex., the Locust, Sensitive Plant, &c.

CONCAM'ERATE, Mal., Lat., *concamerare*, to arch. Arched over.

CONCAMERA'TIONS, Mal., same etym., arcades. A series of vaulted chambers, as in the Natili.

CON'CAVE, Geom., Lat., *concavus*. A term employed in all the branches of Physics. Originally from the Gr., συν (*sun*), with, and χαος (*chaos*), empty. Excavated.

CONCEN'TRIC, Nat. Ph., &c., Gr., συν (*sun*), with, (whence Lat. *con*,) and κεντρον (*kentron*), centre. Circles which have one common centre.

CONCH'A, Anat., Lat., *concha*, a shell. Certainly not the *Conch* of the present day, for that is a univalve, and the Concha of the ancients was a bivalve. The winding of the pavillion leading to the meatus externus, or entrance of the ear.

CONCHOID'AL, Min., Gr., κογχος (*kogchos*), a shell, and ειδος (*eidos*), form. A peculiar sort of cleavage in Minerals, describing the well-known curve called by Nicomedes the *conchoid.*

CONCHYLIOL'OGY, Zool., κογχυλιον (*kogchulion*), shell, and λογος (*logos*), a discourse. The branch of Zoology which treats of the testaceous Mollusca, improperly called Conchology—*Malacology* is a better term than either.

CONCHYLIF'EROUS, Mal., Gr., κογχυλιον (*kogchulion*), a shell, and φερω (*pherō*), I carry. Applied to the testaceous Mollusca because they are furnished with a shell.

CON'DIMENTS, Hyg., Lat., *condire*, to season. Spices, &c. —substances which, added to our food, increase its savor.

CONDU'PLICATE, Bot., Lat., *conduplicatus*, redoubled. One of the modes of prefoliation—that in which each leaf is folded longitudinally upon itself, as in the Linden.

CON'DYLE, Anat., Gr., κονδυλος (*kondulos*), a knot, a joint. A word applied to articular protuberances, and to hinge-like joints in general, such as the condyles of the femur.

CON'DYLOID, Anat., Gr., κονδυλος (*kondulos*), a condyle, and ειδος (*eidos*), form. Condyle-like. Applied to processes, foramina in the vicinity of Condyles, &c.

CONE, Geom., Gr., κωνος (*konos*), a cone. A solid, the figure of which is described by the revolution of a right-angled triangle about one of its legs, which is fixed.

CONGE'NER, Zool., Bot., &c., Lat., *congener*, from Gr., συν (*sun*), with, and γενος (*genos*), genus. Species of the same genus—the Horse and the Ass are congeners, or congeneric.

CONGLO'BATE, Anat., Lat., *con*, with, and *globus*, a ball. A mass of lymphatic vessels—glands without an excretory duct, such as the mesenteric.

CONGLOM'ERATE, Anat., Lat., *con*, with, and *glomerare*, to heap. Glands so called, of which the lobules are united by the same membrane.

CONGLOM'ERATE, Geol., Lat., *conglomerare*, to heap together. Rocks composed of rounded fragments or pebbles cemented by other substances, silicious, calcareous, or argillaceous.

CON'IC SEC'TIONS, Geom., Gr., κωνος (*kōnos*), a cone, and Lat., *sectio*, a section. Certain plane figures so called by Geometers, because they are formed by cutting a cone—the section forming either a triangle, a circle, an ellipsis, &c.

CONIF'ERÆ, Bot., Gr., κωνος (*kōnos*), a cone, and φερω (*pherō*), I bear. Cone-bearing plants. A natural Order of Plants. It is composed of the Pine, Fir, &c.

CONIROS'TRATÆ, Orn., Lat., *conum*, a cone, and *rostrum*, a bill. The *Conirostres*, or Cone-bills, the third Family of the Passerinæ or Passerine Birds.

CON'JUGATE, Bot., Lat., *conjunctum*, united. In pairs.

CON'JUGATE, Geom., same etym., but applied to the shortest of the two diameters through the centre of an ellipsis bounded by the circumference, and perpendicular to each other.

CONJUNC'TION, Ast., Lat., *conjunctio*, joined with. One of the aspects presented by the Planets and Stars. Whenever any two of them appear to meet in the same degree, they are said to be in conjunction.

CONNI'VENT, Anat., Bot., Lat., *connivo*, from Gr., συννευω (*sunneuō*), to wink, to incline. In Anatomy this word is applied to folds of the mucous membrane of the small intestine, the *valvulæ conniventes*, or connivent valves. In Botany it means *convergent*.

CONOID'AL, Geom., Anat., &c., Gr., κωνος (*kōnos*), a cone, and ειδος (*eidos*), form. Approaching to the form of a cone.

CONSTELLA'TION, Ast., Lat., *constellatio*, a group of Stars, from Gr., συντελλω (*suntellō*), to rise together. An assemblage of fixed Stars.

CONSTRIC'TORS, Anat., Lat., *con*, with, and *stringere*, to bind. Muscles so called from their function or action, which tends to close or efface cavities.

CONTA'GIOUS, Hyg., Lat., *con*, with, and *tangere*, to touch. A class of diseases communicated by contact, such as small-pox, &c.

CONTORT'ED, Zool., Bot., Lat., *contortus*, twisted. Any part of an Animal or Plant that is *simply* twisted.

CONTORTU'PLICATED, Zool., Lat., *contortus*, twisted, and *plicatus*, intertwined. A term applied to parts of Animals that are twisted in a highly complicated manner. It is also the specific name of one of the *Tubularia*, the *T. contortuplicata.*

CON'VEX, Geom., Lat., *convexus*, out-bowed. Elevated above a plane in some curve.

CON'VOLUTE, Bot., Lat., *convolvere*, to roll up. One of the modes of prefoliation—that in which each leaf is rolled up spirally from one of its edges, as in the Cherry.

CONVOLU'TION, Anat., *con*, with, and *volvere*, to move round. Any thing rolled upon itself. A term applied to the arrangement of the surface of the brain, &c.

CONVOLVULA'CEÆ, Bot., Lat., *con*, with, and *volvo*, I turn. Twining plants. A natural Order of Plants. It includes a number of twiners, such as the *Morning-glory*, *Dodder*, and parasitic plants.

CO-OR'DINATES, Geom., Lat., *con*, together, and *ordino*, I arrange. A system of lines to which points under consideration are referred, and by which their position is determined.

COP'PER, Chem., Dh., *koper*, Lat., *cuprum*, from the Gr., Κυπρος (*Kupros*), Cyprus, so called because it was formerly obtained from that island. A Metal as well known as it is useful, and universally distributed.

COR'ACOID, Anat., Gr., Κοραξ (*Korax*), a Crow, and ειδος (*eidos*), form. One of the processes of the scapula, so called from its resemblance to the bill of a Crow.

COR'AL, Rad., Gr., κορεω (*koreō*), I adorn, and ἁλς (*hals*), the sea. Those beautiful productions of certain Polypi, well known to us as Corals, and to the French as *Polypier*.

COR'DATE, Bot., Lat., *cor*, the heart. A word expressive of the heart-shaped form of certain leaves.

CORIA'CEOUS, Bot., Hyg., Lat., *corium*, leather. Tough and leather-like—applied to leaves and articles of diet.

CO'RIUM, Anat., *corium*, leather, the hide. The true skin or derma of Anatomists ; the thickest of its six layers.

CORM, Bot., Gr., κορμος (*kormos*), a stem. The enlarged base of a subterranean *stem* of certain plants, such as the *Crocus*—sometimes, but incorrectly, called bulbs.

COR'MOPHYTES, Bot., Gr., κορμος (*kormos*), a stem, and φυτον (*phuton*), plant. Stem-growers. Plants that have a distinct axis of growth *upwards* by means of buds into stems, flowers, &c., and *downwards* into roots. They constitute the first of the two great sections into which plants are divided. See *Thallophytes.*

COR'MUS, Bot., Gr., κορμος (*kormos*), a stem. A distended subterranean base of a stem, of a round or oval figure, and compact tissue, such as that of the Arum triphyllum, or Indian-turnip.

CORNA'CEÆ, Bot., Lat., *Cornus*, the Dog-wood. A natural Order of Plants.

COR'NEA, Anat., Lat., *cornu*, horn. The anterior, external, and circular portion of the eye, through which light passes into the pupil ; so called from its horny tissue.

CORNIC'ULI, Anat., Lat., dimin., of *cornu*, a horn. Little horns—the corniculi laryngis, or little horns of the Larynx. See *Capitulum.*

COR'NU, Anat., Lat., *cornu*, a horn. A term applied to various processes of bone and cartilage.

COROL'LA, Bot., Lat., *corolla*, from Gr., κορωνη (*korōne*), any thing round, or curved, a crown. The exterior floral envelope of plants, or the flower-leaves, which are usually coloured.

CORO'NAL, Anat., Lat., *corona*, a crown. One of the sutures of the head running over its crown, which received its name, because on that part of the head the crown of Kings, &c., reposes.

COR'ONARY, Anat., Lat., *corona*, a crown. Relating to a crown. This term is applied by Anatomists, with a singular contempt of propriety, to ligaments, arteries, veins, &c.

COR'ONATE, Mal., Lat., *corona*, a crown. Encircled near the apex.

COR'ONOID, Anat., Gr., κορωνη (*korōne*), a crow, and ειδος (*eidos*), resemblance. Two processes so called, from their *fancied* similitude to the bill of a Crow, one on the ulna, the other on the inferior maxillary.

COR'PORA, Anat., Lat., *corpus*, a body. This word is frequently used by Anatomists, viz. *Corpora Pyramidalia*, the pyramidal bodies of the Medulla Oblongata: *Corpora Olivaria*, the Olive-like bodies, and the *Corpora Restiforma*, the Rope-like bodies of the same portion of the spinal Marrow. The *Corpora Striata*, or striated or *streaked* bodies, are certain pyriform eminences which form part of the floor of the lateral ventricles of the brain.

COR'PUS, Anat., Lat., *corpus*, a body. A word frequently used in Anatomy and variously applied. Thus we have the *Corpus Callosum*, and the *Corpora Olivaria*, &c.

COR'PUSCLE, Anat., Lat., dimin., of *corpus*, a body. A very small body. It is usually restricted to minute bodies found in the blood, called globules.

CORPUS'CULA, Anat., Lat., *corpusculum*, a little body. A term applied to certain small cartilaginous bodies attached to the semi-lunar valves of the heart, which bodies, from their fancied resemblance to Orange seeds, are called the *Corpuscula Aurantii*.

COR'TICAL, Anat., Lat., *cortex*, bark. A tissue of the body, so called because it envelopes others like a bark—ex., the cortical substance of the kidney.

CORTICA'TI, Rad., Lat., *corticatus*, protected by a bark. The third Family of coralline Polypi, called corticated, because numerous individuals of the same species are united by one common membranous envelope.

CORTICIF'EROUS, Nat. Hist., Lat., *cortex*, bark, and *fero*, I bear. Bodies, animal or vegetable, furnished with an envelope resembling the bark of a tree.

COR'TEX, Bot., Lat., *cortex*, the bark. The outer bark of a plant.

COR'YMB, Bot., Gr., κορυμβος (*korumbos*), the top, or summit. That sort of inflorescence in which the pedicels arising from the various points of the extremity of a branch all grow to the same length, forming a level, or slightly curved, bunch of flowers.

CORYMDIF'EROUS, Bot., Gr., see *Corymb*. Bearing flowers in a corymb.

CORYMBO'SE, Bot., Gr., see *Corymb*. Flowering in corymbs.

COS'MICAL, Ast., Gr., κοσμικος (*kosmikos*), relating to the world. A term applied to a Star when it rises or sets at sun-rise.

COS'TAL, Anat., Lat., *costa*, a rib. Relating to the ribs, as the *costal cartilages*, &c.

COS'TATE, Mal., Lat., *costa*, a rib. Furnished with large ribs.

COS'TATE, Bot., Lat., *costa*, a rib. A term applied to parts marked by regular elevations resembling ribs—ribbed.

COTYLE'DONS, Bot., Gr., κοτυληδων (*kotuledōn*), a cavity, a ladle. The first original, or seminal, pair of leaves which exist in the embryo of a plant, and which differ very materially in appearance from the ordinary leaves produced afterwards.

CO'TYLOID, Anat., Gr., κοτυλη (*kotule*), a cup, and ειδος (*eidos*), form. Cup-like. A hemispherical or cup-like cavity on the innominatum (the acetabulum) which receives the head of the femur. It is also applied to a ligament which encrusts the rim of the acetabulum.

COV'ERTS, Orn., Fr., *couvert*, a cover. Small feathers which lie in several rows on the wings of Birds; so called because they lie over or cover the origin of the others.

COX'A, Ent., Lat., *coxa*, the hip. The first or superior portion of the leg of an Insect.

CRA'NIUM, Anat., Gr., κρανον (*kranon*), the head. That part of the head which contains the brain.

CRASSULA'CEÆ, Bot., Lat., *crassus*, thick, heavy. A natural Order of Plants. It includes the House-leek, Stone-crop, &c.

CRA'TER, Geol., Gr., κρατηρ (*krater*), a large vase. Applied in Geology to the cavities formed by volcanoes.

CRE'MOCARP, Bot., Gr., κρεμαω (*kremaō*), I suspend, and καρπος (*karpos*), fruit. That sort of fructification in which a pair of achenia are supported by the *carpophore*.

CRE'NATE, Bot., Lat., *crena*, a dent. Leaves, so called, of which the margin is dentated, but where the point of the teeth is rounded.

CREN'ULATE, Mal., Lat., *crena*, a notch. Scalloped or notched in the margin.

CRE'OSOTE, Chem., Gr., κρεας (*kreas*), flesh, and σωζω (*sōzō*), I save. An oily, colourless liquid, of a penetrating and disagreeable odour, a caustic and burning taste. It is one of the constituents of wood-smoke, tar, &c., and obtains its name from its antiseptic qualities.

CREPUSCULA'RIA, Ent., Lat., *crepusculum*, twilight. The second Family of Lepidopterous Insects, so called because they fly only in the evening. It includes the Moth, Sphinx, &c.

CRIB'RIFORM, Anat., Lat., *cribrum*, a sieve. Sieve-like. Parts pierced by numerous holes are so called, as the cribriform plate of the ethmoid bone.

CRI'COID, Anat., Gr., κρικος (*krikos*), a ring. One of the principal cartilages of the Larynx, so called from its circular or annular form. Combined with arytenoid, the same term is applied to muscles which arise from the *cricoid*, and are inserted into the arytenoid cartilage, as the *Crico-arytenoideus*, &c.

CRIOC'ERES, Ent., Gr., Κριος (*Krios*), a Ram, and κερας (*keras*), horn. A group of Insects, so called because their antennæ bear some resemblance to a Ram's horns.

CRIS'PATE, Mal., Lat., *crispatus*, wrinkled. Roughened with waved lines.

CRIS'TA, Anat., *crista*, a crest, tuft, top-knot. A term applied to projecting portions of various organs, as the *Crista galli*, or cock's comb, of the ethmoid bone.

CRIS'TATE, Bot., Lat., *cristatus*, crested. Furnished with a crest—or, crest-like.

CRU'CIFORM, Bot., Lat., *crux*, a cross, and *forma*, shape. In the form of a cross. An Order of Plants, so called because their four, one-clawed, petals are arranged like the limbs of a cross.

CRU'RA, Anat., Lat., *crus*, a leg. Legs. Applied to parts of organs which may be compared to their legs, such as the crura of the brain.

CRU'RAL, Anat., same etym. Relating to the leg or thigh, as the crural artery, &c.

CRUSTA'CEA, Crust., Lat., *crusta*, a crust-like covering. Crustaceous Animals. The first Class of Articulata, with articulated feet. It is composed of the Crabs, Lobsters, &c.

CRUSTACEOL'OGY, Zool., Lat., *Crustacea*, q. v., and Gr., λογος (*logos*), a treatise. That branch of Zoology which treats of the Crustaceous Animals.

CRYOPH'ORUS, Chem., Gr., κρυος (*kruos*), frost, and φορος (*phoros*), that bears. Frost-bearer. An instrument invented by Wollaston for freezing water by its own evaporation.

CRYP'TA, Anat., Gr., κρυπτος (*kruptos*), concealed. A crypt is a minute sac concealed in the skin or mucous membranes—synonymous with *follicle*.

CRYPTOCEPH'ALOUS, Ent., Gr., κρυπτος (*kruptos*), concealed, and κεφαλη (*kephale*), head. A term applied to Insects in which the head is concealed by the pro-thorax or corslet.

CRYPTOGA'MIA, Bot., Gr., κρυπτω (*kruptō*), I conceal, and γαμος (*gamos*), nuptials. The twenty-fourth Class of Plants in the Linnæan system, so called because the stamens and pistils are either concealed or wanting.

CRYPTOG'AMOUS, Bot., Gr., κρυπτος (*kruptos*), hidden, and γαμος (*gamos*), nuptials. Concealed nuptials. A term applied by the older Botanists to those Plants in which the reproductive organs are concealed—now called Flowerless Plants; such are the *Fungi*, *Lichens*, *Mosses*, &c.

CRYPTOÇ'EROUS, Ent, Gr., κρυπτος (*kruptos*), concealed, and κερας (*keras*), horn. Applied to Insects in which the antennæ lie hid in a groove.

CRYS'TALS, Min., Gr., κρυσταλλος (*krustallos*), ice, from κρυος (*kruos*), cold, and στελλομαι (*stellomai*), to thicken. Mineral bodies, both transparent and opaque, having regular and determined figures, so styled by the ancients from the resemblance of rock-crystals (as they are called) to ice.

CRYS'TALLINE LENS, Anat., Gr., see *Crystal* and *Lens*. A double convex lens of the eye, situated directly behind the pupil.

CRYS'TALLINE, Min., Chem., Gr., see Crystal. Resembling crystal.

CRYSTALLOG'RAPHY, Min., Gr., κρυσταλλος (*krustallos*), ice, and γραφω (*graphō*), I write, or describe. That branch of Mineralogy which investigates the history of Crystals.

CUBE, Geom., Gr., κυβος (*kubos*), a cube. A solid body contained within six, equal, square sides.

CU'BITUS, Anat., Gr., κυβιτον (*kubiton*), elbow. One of the two bones of the fore-arm.

CUBOI'DES, Anat., Gr., κυβος (*kubos*), a cube, and ειδος (*eidos*), form. Shaped like a cube. One of the seven bones of the Tarsus, or ankle.

CUCUL'LATE, Bot., Gr., κυκλος (*kuklos*), a cowl, a hood. Hooded.

CUCURBITA'CEÆ, Bot., Lat., *Cucurbita*, a Pumpkin, Gourd. A natural Order of Plants. It includes the Pumpkin, Squash, Cucumber, Melon, &c.

CULM, Bot., Lat., *culmen*, or *culmus*, a stalk of wheat. The stem of the Grasses.

CULMINA'TION, Ast., Lat., *culminare*, to rise to the highest point. The transit of a star over the meridian. The greatest altitude of a star on any given day.

CULTIROS'TRATÆ, Orn., Lat., *culter*, a knife, and *rostrum*, a bill. Knife-bills, the third Family of the Grallatoriæ, or Waders—ex., the Cranes.

CUL'TRATE, Nat. His., Lat., *culter*, a ploughshare. Applied to any body that is coulter-shaped, or straight on one side, and curved on the other.

CU'NEIFORM, Anat., Lat., *cuneus*, a wedge, and *forma*, form. Wedge-shaped. A term expressive of the form of various parts of the body. Three of the bones of the tarsus are so called.

CU'PULE, Bot., Lat., *cupula*, a little basin. A term applied to a cup-like involucre of imbricated bracts, as in the Oak.

CUPULIF'ERÆ, Bot., Lat., *cupula*, a cup, and *ferre*, to carry. A natural Order of Plants—ex., the *Oak*, the fruit of which is placed in a cup.

CURSO'RIA, Ent., Lat., *cursorius*, running. Running Insects. The first Family of the Orthoptera. It includes the Blatta, or Cockroach, Earwigs, &c.

CUR'TATE, Ast., Lat., *curtare*, to cut short. The *curtate distance* is the distance of a planet from that point of the Earth or Sun where a perpendicular drawn from such planet would intersect the ecliptic

CUSP, Ast., Geom., Lat., *cuspis*, a point. The points, or horns, of the Moon. The point or corner formed by two parts of a curve which meet there.

CUS'PIDATE, Bot., Lat., *cuspis*, a point. Pointed.

CU'TICLE, Anat., Lat., *cuticula*, the scarf skin. The first or most superficial of the layers of the skin.

CYAN'OGEN, Chem., Gr., κυανος (*kuanos*), blue, and γενναω (*gennaō*), I produce. An organic radical, gaseous when free, and uniting with the whole of the metals forming salts. It is a colourless, permanent, and inflammable gas burning with a beautiful blue flame, whence its name.

CYANOM'ETER, Opt., Gr., κυανος (*kuanos*), blue, and μετρον (*metron*), measure. An instrument invented by Saussure for determining the intensity of the blue colour of the heavens.

CYCADA'CIÆ, Bot., Gr., κυκας (*kukas*), a sort of Æthiopian palm. A natural Order of Plants.

CY'CLE, Ast., Gr., κυκλος (*kuklos*), a circle. A period of time revolving into itself. The *solar* cycle consists of twenty-eight years; the *lunar*, nineteen, &c.

CY'CLICA, Ent., Gr., κυκλος (*kuklos*), round. The sixth Family of coleopterous Insects; so called from their rounded bodies.

CYCLOP'TEROUS, Icth., Gr., κυκλος (*kuklos*), circle, and πτερον (*pteron*), wing. Applied to Fishes in which the fins are united so as to form a considerable segment of a circle.

CYCLOS'TOMI, Icth., Gr., κυκλος (*kuklos*), a circle, and στομα (*stoma*), a mouth. The second Family of chondropterygious Fishes with fixed branchiæ. It includes the Lampreys and some, few, other genera in which the mouth is circular, or like a ring.

CYL'INDER, Geom., Gr., κυλιω (*kuliō*), to roll. A roller. A geometric solid, of which the superior and inferior base form equal circles, or a solid described by the revolution of a right angle about one of its sides, that is, its axis.

CYM'BIFORM, Mal., Lat., *cymbula*, a skiff, or gondola. Shaped like a boat.

CYME, Bot., Gr., κυμα (*kuma*), a sprout. A sort of Inflorescence, so called, because it is formed by a regular trifurcate ramification, forming, when completed, a broad and flat-topped cluster of flowers, as in the Hydrangea, Laurestinus, &c.

CYMO'SE, Bot., Cyme-like. See *Cyme*.

CY'MULE, Bot., diminutive of *Cyme*, which see.

CYPERA'CEÆ, Bot., Gr., Κυπειρος (*Kupeiros*), Sword-grass. A natural Order of Plants. They are mostly tropical.

CYPRINOI'DEÆ, Icth., Gr., Κυπρινος (*Kuprinos*), a Carp, and ειδος (*eidos*), form. Carp-like Fishes. The first Family of the second Order of malacopterygious Fishes.

CYP'SELA, Bot., Gr., κυψελη (*kupsele*), a bee-hive. See *Achenium*, of which it is a synonyme.

CYS'TIC, Anat., Gr., κυστις (*kustis*), a bladder. This word is restricted to the appendages of the gall-bladder—ex., the *ductus cysticus*, or cystic duct, cystic bile, &c.

[illegible] from marsupium, a bag. [illegible]

DASYU'RUS, Zool., Gr., δασυς (*dasus*), thick, hairy, and ουρα (*oura*), tail. A group of marsupial Animals furnished with a furry tail.

DEC'AFID, Bot., Gr., δεκα (*deka*), ten, and Lat., *findere*, to split. Divided into ten parts.

DECAGYN'IA, Bot., Gr., δεκα (*deka*), ten, and γυνη (*gune*), female. The tenth Order of the first thirteen Classes of Plants, according to Linnæus. They have ten styles.

DEC'AGRAMME, Chem., Gr., δεκα (*deka*), ten, and γραμμα (*gramma*), a gramme. Ten grammes or 154,.44 grains Troy weight.

DECAN'DRIA, Bot., Gr., δεκα (*deka*), ten, and ανηρ (*aner*), male. The tenth Class of Plants in the Linnæan system, so named, because the flowers have ten stamens.

DECAN'DROUS, Bot., Gr., δεκα (*deka*), ten, and ανηρ (*aner*), a male. Flowers so called which have ten stamens.

DECAPET'ALOUS, Bot., Gr., δεκα (*deka*), ten, and πεταλον (*petalon*), petal. Having ten petals.

DECAP'ODA, Crust., Gr., δεκα (*deka*), ten, and πους (*pous*), foot. Ten-footed. The first Order of the malacostraceous Crustacea, so called, because the animals which compose it are furnished with five pairs of foot-paddles, placed under the abdomen. It contains the common Crab, Lobster, &c.

DECID'UOUS, Bot., Lat., *deciduus*, falling. A term applied to leaves that last but a single season, and fall in the autumn.

DEÇ'IGRAMME, Chem., Lat., *decimus*, the tenth, and Gr., γραμμα (*gramma*), a gramme. The tenth of a gramme, or 1.544 grains Troy.

DECLINA'TION, Ast., Gr., εκκλινειν (*ekklinein*), to go out of the way, to decline, &c. The distance of the Sun, Moon, and Stars, from the equator, N. or S.

DECLI'NED, Bot., Lat., *declinatus*, bent aside. Applied to leaves that are turned to one side.

DECUM'BENT, Bot., Lat., *decumbo*, I lie down. Applied to leaves that lie on the ground.

DECUR'RENT, Bot., Lat., *decurro*, I run down. Leaves are said to be decurrent when the margin is continued down along the petiole or stem.

DECUS'SATE, Bot., Anat., &c., Lat., *decussare*, to cross. A term applied to any line or organ that crosses another. In Botany, to leaves in pairs alternately crossing each other.

DEFLAGRA'TION, Chem., Lat., *deflagro*, I burn. Applied to sudden, rapid, and violent combustion.

DEGREE', Ast., *gradus*, a step. The 360th part of a circle.

DEHIS'CENT, Bot., Lat., *dehiscere*, to split, to open. One of the modes by which the seeds of a fruit are discharged; that is, by the splitting of the pericarp.

DELIQUES'CENT, Chem., Lat., *deliquescere*, to dissolve. A term applied to salts which absorb moisture from the air, and thus become fluid.

DEL'TOID, Anat., Gr., Δ, δελτα (*delta, D*), and ειδος (*eidos*), form. A triangular Muscle, so called from its shape, that elevates the arm.

DEMER'SED, Bot., Lat., *demersus*, immersed. Under water.

DENTIC'ULATED, Anat., Bot., *denticulatus*, furnished with teeth. A ligament so called (*ligamentum denticulatum*), because it is furnished with tooth-like processes. It is found in the spinal canal, and separates the anterior and posterior roots of the spinal nerves. In Botany it is applied to the margin of Leaves.

DENTIROS'TRATÆ, Orn., Lat., *dens*, a tooth, and *rostrum*, a bill. Tooth-billed. The first Family of the Passerinæ or Passerine Birds, so called, because each side of the point of their bill is emarginate or toothed. It contains the Butcher-Bird, Fly-catchers, &c.

DENUDA'TION, Geol., Lat., *denudare*, to strip. The removal of solid matter, not merely of earth, but of rocks by the action of running water.

DEOXYDA'TION, Chem., Gr., δε (*de*), privative, οξυς (*oxus*), acid, and γεινομαι (*geinomai*), to produce. The act of depriving a body of the oxygen it contains.

DEPRES'SOR, Anat., *deprimere*, to depress, or pull down. A term applied by Anatomists to a number of muscles, antagonists of the *Levatores*, or elevators.

DER'MA, Anat., Gr., δερμα (*derma*), skin. Restricted by Anatomists to the Corium or true skin.

DERMES'TES, Ent., Gr., δερμα (*derma*), skin, and εσθιω (*esthiō*), I eat, or gnaw. A group of Insects, of which the larvæ live on all sorts of animal matter—the pest of all zoological cabinets.

DER'MOID, Anat., Gr., δερμα (*derma*), skin, and ειδος (*eidos*), form. A term applied to tissues resembling the skin.

DERMOL'OGY, Anat., Gr., δερμα (*derma*), skin, and λογος (*logos*), a treatise. That part of Anatomy which treats of the Skin.

DES'MOID, Anat., Gr., δεσμος (*desmos*), a ligament, and ειδος (*eidos*), shape. A tissue so called that forms Ligaments, &c.

DESMOG'RAPHY, Anat., Gr., δεσμος (*desmos*), ligament, and γραφη (*graphe*), to write. A treatise on the Ligaments.

DETRI'TUS, Geol., Lat., *detritus*, ground into small fragments. A term applied by Geologists to various deposits of comminuted mineral matter. Sand, for instance, is the detritus of siliceous rocks.

DEUTOX'IDE, Chem., Gr., δευτερος (*deuteros*), second, and *oxide*, q. v. A term implying that the body to which it is applied contains *more* oxygen than a *protoxide*, and less than a *tritoxide*, &c.

DEX'TRIN, Chem., Lat., *dexter*, to the right. A gum-like substance produced from Starch. It is so called by Biot from its action on polarized light, causing the plane of polarization to deviate very considerably to the right. It is a substance well known in the arts as a substitute for gum, under the name of British Gum.

DIACOUS'TICS, Ac., Gr., δια (*dia*), through, and ακουω (*akouō*), I hear. That branch of Acoustics which treats of refracted Sounds.

DIADEL'PHIA, Bot., Gr., δις (*dis*), two, and αδελφος (*adelphos*), brother. The seventeenth Class of Plants, according to Linnæus, so called, because the anthers are connected by their filaments in two sets.

DIAG'ONAL, Geom., Gr., δια (*dia*), through or across, and γωνια (*gōnia*), an angle. A line which traverses a figure through its angles.

DI'AGRAM, Geom., &c., Gr., δια (*dia*), of, and γραμμη (*gramme*), line. A geometric figure, or lines, serving to demonstrate a proposition.

DIAM'ETER, Geom., Ast., &c., Gr., δια (*dia*), across, and μετρον (*metron*), a measure. A line passing through a circle or sphere, and terminated at each end by the circumference. The same term is applied to lines of measurement through or across bodies of various forms by Anatomists, &c.

DIAN'DROUS, Bot., Gr., δις (*dis*), two, and ανηρ (*aner*), male. A word indicating the absolute number of Stamens in a flower, which here, of course, are two.

DIAN'DRIA, Bot., Gr., δις (*dis*), two, and ανερ (*aner*), a male. The second Class of Plants, according to Linnæus; so called because the flowers have but two stamens.

DIAPH'ANOUS, Min., Gr., δια (*dia*), through, and φαινω (*phainō*), to shine. The diaphaneity of a mineral is its capability of transmitting light. It exists in various degrees, and is transparent, subtransparent, translucent, &c.

DIAPH'ANOUS, Opt., &c., Gr., δια (*dia*), through, and φαινω (*phainō*), I shine. Translucent bodies are diaphanous. If the perfect form of an object can be seen through them, then they are *transparent.*

DIAPHORE'SIS, Phys., Gr., δια (*dia*), through, and φερω (*pherō*), I bear. Perspiration.

DI'APHRAGM, Anat., Gr., δια (*dia*), between, and φρασσω (*phrassō*), I close. A large Muscle that separates the thoracic from the abdominal cavity, and is one of the active agents in respiration.

DIARTHRO'SIS, Anat., Gr., δια (*dia*), between, and αρθρον (*arthron*), a limb, or joint. That sort of articulation which admits of considerable motion, such as the shoulder.

DIASPORAM'ETER, Opt., Gr., διασπειρω (*diaspeirō*), to disperse, and μετρον (*metron*), measure. An instrument for measuring the aberration of the refrangibility of Light.

DI'ASTASE, Chem., Gr., διαστασις (*diastasis*), from διιστημι (*diistemi*), to separate. A white, solid, amorphous, vegetable principle, obtained from freshly germinated barley. It received its name from its property of *separating* two of the supposed constituents of Starch.

DIAS'TOLE, Phys., Gr., δια (*dia*), through, and στελλω *stellō*), I send. The dilatation of the heart and arteries, the opposite motion to the *systole*.

DIATHER'MANCY, Nat. Ph., Gr., δια (*dia*), through, and θερμαινω (*thermainō*), to heat. The transmission of heat.

DIATH'ESIS, Hyg., &c., Gr., διατιθημι (*diatithemi*), I dispose, or constitute. Any peculiar constitutional tendency of the body.

DIATON'IC, Min., Gr., δια (*dia*), through, and τεμνω (*temnō*), to cut. That line of cleavage which is parallel to a diagonal plane.

DICHOT'OMOUS, Ast., Gr., διχα (*dicha*), in half, and τεμνω (*temnō*), I cut. In Astronomy, applied to the Moon when only one half of her disk is visible.

DICHOT'OMUS, Bot., Gr., διχα (*dicha*), in half, and τεμνω (*temnō*), I cut. Applied to stems of Plants which are successively forked.

DI'CHROISM, Opt., Gr., δις (*dis*), two, and χρωμα (*chrōma*), colour. A term in Optics expressive of a property possessed by certain crystals, of presenting two distinct colours, according to the direction in which light is transmitted through them.

DIC'LINOUS, Bot., Gr., δις (*dis*), two, and κλινη (*kline*), couch. Plants in which the stamens are on one flower, and the pistils on another.

DI-COC'COUS, Bot., Gr., δις (*dis*), two, and κοκκος (*kokkos*), a grain. Fruits in which the *two* carpels are separated from each other, but without splitting.

DICOTYLED'ONOUS, Bot., Gr., δις (*dis*), two, and κοτυληδων (*kotuledōn*), cotyledon. Plants furnished with two seminal leaves, or lobes. All *Exogenous* plants have two cotyledons, and hence both terms are employed for the same great division.

DIDAC'TYLE, Zool., Gr., δις (*dis*), two, and δακτυλος (*daktulos*), finger, or toe. Having but two toes to each foot.

DIADEL'PHOUS, Bot., Gr., δυο (*duo*), two, and αδελφος (*adelphos*), brother. A term indicating the mode of union of the stamens in certain flowers, or where they are united by their filaments into two sets.

DIDYM'IUM, Chem., Gr., διδυμος (*didumos*), double. A new Metal discovered by Mosander that always accompanies Yttrium, Cerium, and Lantanum.

DIDYNA'MIA, Bot., Gr., δις (*dis*), two, and δυναμις (*dunamis*), power. The fourteenth Class of the Linnæan system of Plants, so called because two of the stamens are longer than the others.

DIDYN'AMOUS, Bot., Gr., δις (*dis*), two, and δυναμις (*dunamis*), power. Flowers in which a portion of the floral organs remains undeveloped, or where two of the four stamens are longer than the rest.

DI'ET, Hyg., Gr., διαιτα (*diaita*), regimen, a systematic mode of living.

DIGAS'TRIC, Anat., Gr., δις (*dis*), two, and γαστηρ (*gaster*), belly. A term formerly applied to several muscles with double bellies, now restricted to one connected with the hyoid bone and inferior maxillary—the *Digastricus*.

DIG'IT, Ast., Lat., *digitus*, a finger. A measure taken from the breadth of the finger. The twelfth part of the Sun's or Moon's diameter.

DIGITA'TIONS, Anat., Lat., *digitus*, a finger. A term applied in Anatomy to finger-like divisions of muscular fasciculi.

DIGITIGRA'DA, Mam., Lat., *digitus*, a finger or toe, and *gradus*, a step. Toe-steppers. The second Tribe of the Carnivora, so called because all the Animals which compose it step on the point of their toes. It includes the *Weasels*, *Otters*, *Dogs*, *Cats*, &c.

DIG'ITIGRADE, Mam., same etym. That sort of light elastic motion depending on the mode in which the foot is brought to the ground in stepping, viz., on the toe, and which seems essential to the perfection of the carnivorous regimen.

DIGYN'IA, Bot., Gr., δις (*dis*), two, and γυνη (*gune*), female. The first Order of the first thirteen Classes of Plants in the Linnæan system; so called because the flowers have two styles.

DIGYN'OUS, Bot., Gr., δις (*dis*), two, and γυνη (*gune*), female. Flowers with two pistils.

DIKE, Geol., A. S. *dic-ian*, to dig a trench. Tissues in rocks filled up with foreign matters, sometimes with a mass of melted stone. In the latter case, it is called a *trap dike.*

DILU'VIAL, Geol., relating to a formation called *diluvium*, which see.

DILU'VIUM, Geol., Lat., *diluvium*, deluge. A formation so named because the earlier Geologists supposed it to have been produced by the violence of a sudden and transient deluge. It assumes a more distinct character than the *alluvium* in certain high latitudes, and consists of enormous fragments of rocks mingled with smaller ones, some rounded and others angular, which have been transported by the agency of Ice from distant mountains. It is synonymous with the "*Drift*," or "*Boulder*," formation.

DIMET'RIC, Min., Gr., δις (*dis*), two, and μετρον (*metron*), measure. A term applied to the second of the six distinct systems or forms of crystallization—it includes the rhombic and rectangular prisms, and rhombic octahedron.

DIMOR'PHISM, Chem., Min., Gr., δις (*dis*), two, and μορφη (*morphe*), form. The property possessed by certain compounds of assuming two distinct systems of crystallization.

DIŒ'CIA, Bot., Gr., δις (*dis*), two, and οικια (*oikia*), house. The twenty-second Class of Plants, according to Linnæus. Here the pistillate system is on one flower, and the staminate on another, hence the term.

DIŒ'CIOUS, Bot., Gr., δις (*dis*), two, and οικια (*oikia*), house. Plants in which the stamens and pistils are borne by separate individuals, as is the case with the Willow, Poplar, Hemp, &c., where the male flower is on one plant, and the female on another.

DIOP'TRICS, Opt., Gr., δια (*dia*), through, and οπτομαι (*optomai*), I see. That branch of objects, which treats of the passage of rays of light through transparent media, when they are usually bent from their primitive course or refracted. The refraction of light.

DIP, Min., A. S. *dippan*, to *dive*, immerse, &c. In Geology the inclination of a stratum, or bed, from a horizontal line, is thus named. The point of the compass, to which it inclines, is the *point of dip*, and the degree of deviation from the level, the amount of dip.

DIP'LOE, Anat., Gr., διπλοη (*diploe*), double. The spongy substance which is placed between the two tables of the walls of the cranium.

DIPLOP'TERA, Ent., Gr., διπλους (*diplous*), double, and πτερον (*pteron*), a wing. The third Family of the aculeated Hymenoptera, so called because their superior wings are doubled or folded longitudinally.

DIPSA'CEÆ, Bot., Gr., Διπσακος (*Dipsakos*), the Teasel. The seventy-fourth Order of Plants, containing the *Scabious*, and the *Dipsacus fullonum*, the dry heads of which, armed with spiny bracts with bent points, are well known as Teasels.

DIP'TERA, Ent., Gr., δις (*dis*), twice, and πτερον (*pteron*), a wing. Two winged Insects. The twelfth Order of Insects. It includes an immense series of Insects furnished with but two membranous wings, and two little appendages —possibly vestiges of the second pair—called halteres. The common *Fly*, *Mosqueto*, &c. &c., belong to it.

DISC, Astr., Gr., δισκος (*diskos*), a quoit. The face of the Sun or Moon.

DISCO'BOLI, Icth., Gr., δισκοβολος (*diskobolos*), a quoit-player. The third Family of the subrachiate Malacopteryii, so called because the Fishes which compose it have their ventral fins in the form of a disk, or quoit—rounded.

DISCOID'AL, Mal., Gr., δισκος (*diskos*), a disc, and ειδος (*eidos*), form. A term applied to univalve shells, in which the whorls of the spire turn round a point on one plane and touch each other.

DISK, Bot., Gr., δισκος (*diskos*), a quoit, or disk. An entire or lobed ring, or row of fleshy bodies, which is sometimes found surrounding the base of the pistils of a flower.

DISK, Mal., Gr., δισκος (*diskos*), a disk. That part of a shell which lies between the umbo and the margin—the middle part of the valves.

DISSEP'IMENTS, Bot., Lat., *disseptum*, separated by a partition. The united contiguous parts of the sides of the carpels, forming the partitions which separate the cavity of one from that of another.

DIS'TICHOUS, Bot., Gr., δις (*dis*), two, and στιχος (*stichos*), a row, or range. Placed in two opposite rows.

DISTILLA'TION, Chem., Lat., *de*, and *stillare*, to drop, from Gr., σταλαω (*stalaō*), the same. An operation by which volatile are separated from fixed parts of bodies by means of heat.

DIUR'NA, Ent., see *Diurnæ*. Diurnal. The first Family of the Lepidoptera, or Lepidopterous Insects, so called because they fly only by day. It includes the genus *Papilio*, or *Butterfly* proper.

DIUR'NÆ, Orn., Lat., *diurnus*, by day, diurnal. The first of the two Families of the Rapaceæ, or Birds of Prey, so called because they fly by day only.

DIVAR'ICATE, Bot., Lat., *divaricare*, to separate. Widely spreading.

DOCIMAS'TICS, Chem., Gr., δοκιμαζω (*dokimazō*), I prove. The art of assaying minerals or ores so as to ascertain the quantity of pure metal they contain.

DODEC'AGON, Geom., Gr., δωδεκα (*dōdeka*), twelve, and γωνια (*gōnia*), angle. A regular polygon with twelve angles and twelve sides.

DODECAHE'DRON, Geom., &c., Gr., δωδεκα (*dōdeka*), twelve, and ἑδρα (*hedra*), a seat, or base. A regular body which has twelve equal pentagonal faces, or facets.

DODECAGYN'IA, Bot., Gr., δωδεκα (*dōdeka*), twelve, and γυνη (*gune*), female. The eleventh Order of the Linnæan system of Plants. The flowers, here, have twelve (or eleven) styles.

DODECAN'DROUS, Bot., Gr., δωδεκα (*dodeka*), twelve, and ανηρ (*aner*), male. Flowers with twelve stamens.

DODECAN'DRIA, Bot., Gr., δωδεκα (*dōdeka*), twelve, and ανηρ (*aner*), male. The twelfth Class of Plants in the Linnæan system. Plants having twelve stamens.

DO'LOMITE, Min., Fr., after *Dolomieu.* A magnesian marble.

DO'MITE, Min., Fr., *Puy de Dome*, a district of France so called. A variety of Trachyte.

DOR'SAL, Anat., Lat., *dorsum*, the back. Relating to the back, as the dorsal vertebræ.

DRIFT, Geol., see diluvium.

DROSOM'ETER, Nat. Ph., δροσος (*drosos*), dew, and μετρον (*metron*), measure. An instrument invented by Weidler to determine the quantity of dew that collects on the surface of any body during the night.

DRUPE, Bot. Lat., *Drupa*, (an Olive,) a stone fruit. A one-celled simple fruit, the endocarp of which is hard, and the epicarp fleshy, such as the Peach, Apricot, Olive, &c.

DUCTS, Anat., Lat., *ductus*, a canal or pipe. A term applied to the membranous tubes by which the secretions are conveyed from their glands.

DUODE'NUM, Anat., Gr., δυο (*duo*), two, and Lat., *deni*, ten. Twelve. The first or superior portion of the small intestine, so called from its being about the length of the breadth of twelve fingers, for which reason it is sometimes called *dodecatac'tylon*, literally, twelve fingers.

DU'PLICATURE, Anat., Lat., *duplex*, two-fold. The fold of a membrane, such as the duplicatures of the *Peritoneum*, *Pleura*, &c.

DU'RA MA'TER, Anat., Lat., *dura*, hard, from its toughness, and *mater*, mother, because it was supposed to be the origin of all other membranes. The most external of the three membranes that envelope the brain and spinal marrow.

DURA'MEN, Bot., Lat., *duramen*, hardening, solidity. A term applied to what is commonly called the heart, or heart-wood of a tree.

DYNAM'ICS, Nat. Ph., Gr., δυναμις (*dunamis*), force, from δυναμαι (*dunamai*), I can. That branch of Nat. Ph. which investigates the laws of motion, or the action of forces upon solids when motion is the result.

DYNAMOM'ETER, Phys., Gr., δυναμις (*dunamis*), power, and μετρον (*metron*), measure. A machine (invented by Regnier) for measuring the comparative strength of Animals.

DYSTOM'IC, Min., Gr., δυς (*dus*), difficulty, and τεμνω (*temnō*), to cut. Cleavage effected with difficulty.

DYTIS'CUS, Ent., Gr., δυτης (*dutes*), a diver. The name of a group of Insects, so called because they are eminently aquatic.

EBENA'CEÆ, Bot., Gr., Εβενος (*Ebenos*), the Ebony Tree. A natural Order of Plants, most of them tropical; our *Persimmon*, however, is one of them.

ECCEN'TRIC, Geom., Gr., εξ (*ex*), out of, and κεντρον (*kentron*), the centre. The word eccentric is applied to two or more combined circles which have not one common centre.

ECCENTRIC'ITY, Ast., Gr., εξ (*ex*), out of, and κεντρον (*kentron*), centre. The distance of the centre from the foci of a planet's elliptical orbit.

ECCRINOL'OGY, Phys., Gr., εκκρινω (*ekkrinō*), I separate, and λογος (*logos*), a treatise. That branch of Physiology which treats of Secretion.

ECH'INATE, Bot., Gr., Εχινος (*Echinos*), a Hedge-Hog. Loaded with prickles.

ECHINODER'MATA, Rad., Gr., Εχινος (*Echinos*), a Hedge-Hog, and δερμα (*derma*), skin. The first Class of radiated Animals, so called because they have a well-organized skin covered with movable and articulated spines. It includes the *Star-Fishes*, *Sea-Urchins*, &c.

ECH'O, Ac., Gr., ηχος (*echos*), sound. A reflected sound. The same term is also applied to the locality where it is produced.

ECLIP'SE, Ast., Gr., εκλειψις (*ekleipsis*), want of, privation, that is, of light. The obscuration of a celestial body produced by the interposition of another, such as an eclipse of the Sun or Moon.

ECLIP'TIC, Ast., Gr., εκλειψις (*ekleipsis*), eclipse. A great circle of the sphere or orbit of the Earth which the Sun appears to describe in a year. It is called the ecliptic because an eclipse never takes place unless the Moon is in or very near this circle.

ECON'OMY, Hyg., Gr., οικος (*oikos*), the house, and νομος (*nomos*), the rule. The body of laws which govern the Organism.

ECTOZO'A, Zool., Gr., εκ (*ek*), without, and ζωον (*zōon*), an animal. Parasitic Animals that inhabit the exterior of animal bodies, such as the Flea, Louse, &c.

EDENTA'TA, Mam., Lat., *edentatus*, toothless. The sixth Order of the Mammalia, so called because the animals which compose it have no front teeth, and some of them no teeth of any kind—the *Ant-Eaters*, for instance.

EF'FERENT, Phys., Lat., *effèro*, I carry. Lymphatic vessels, so called because they carry their lymph from the lymphatic glands to the thoracic duct, whilst those that convey it to those glands are called *afferent*.

EFFERVES'CENCE, Chem., Lat., *effervescere*, to grow warm. The agitation produced by the disengagement and escape of a gas.

ELABORA'TION, Phys., Lat., *e*, and *laborare*, to work out. Applied to the action producing the various changes of the food before it is fitted to nourish the body.

ELAI'N, Chem., Gr., ελαιον (*elaion*), oil. A synonyme of *Oleine*. That oil of fat which may be expressed from hog's lard, suet, and other solid fats, and which retains its fluidity at the same temperature that stearine becomes solid.

ELASTIC'ITY, Phys., Gr., ελαστης (*elastes*), which pushes. That property of certain bodies by which, after extension, they return to their former size.

ELATER'IDÆ, Ent., Gr., ελατηρ (*elater*), a leaper. An extensive group of coleopterous Insects, vulgarly called Snap-bugs, because if they fall on the back, they bend their head toward the tail, raise the latter a little, and then give a spring into the air which they repeat until they light on their feet.

ELA'TERS, Bot., Gr., ελατηρ (*elater*), an agitator. Spiral threads that are mixed with the *spores* of the Hepaticæ.

ELATINA'CEÆ, Bot., Gr., Ελατινη (*Elatine*). A plant so called by Pliny, and forming the type of the genus Elatine. A natural Order of Plants.

ELEAGNA'CEÆ, Bot., Gr., ελαιαγνος (*elaiagnos*), a plant so called by Theophrastus. A natural Order of Plants.

ELECTRIC'ITY, Nat. Ph., &c., Gr., ηλεκτρον (*elektron*), amber. A fluid so called because it was first noticed in amber when lightly rubbed.

ELEC'TRODE, Nat. Ph., Gr., see *Electricity*, and ὁδος (*hodos*), a way. The surface or points by which electricity passes into or out of a body. See *Anode* and *Kathode.*

ELECTRODYNAM'ICS, Nat. Ph., Gr., ηλεκτρον (*elektron*), amber, (electricity,) and δυναμις (*dunamis*), force. That branch of Nat. Ph. which treats of the magnetic character of electric currents produced in a particular manner. The phenomena of electricity in motion.

ELEC'TROLYTE, Nat. Ph., Gr., *Electricity*, q. v., and λυω (*luō*), to set free. Any substance susceptible of decomposition by electricity.

ELEC'TRO-MAG'NETISM, Nat. Ph., Gr., see *Electricity* and *Magnetism.* The magnetic phenomena developed by the passage of an electrical current through any electrode.

ELECTROM'ETER, Nat. Ph., Gr., ηλεκτρον (*elektron*), electricity, (amber,) and μετρον (*metron*), measure. An instrument for ascertaining the amount of electricity in any body.

ELECTROPH'ORUS, Nat. Ph., Gr., ηλεκτρον (*elektron*), amber, (electricity,) and φερω (*pherō*), I carry. An instrument for collecting electricity by induction.

ELEC'TROSCOPE, Nat. Ph., Gr., ηλεκτρον (*elektron*), amber, (electricity), and σκοπεω (*skopeō*), I observe. An instrument used to ascertain the amount of electricity in the atmosphere, or to render visible the effects of electricity.

EL'EMENT, Chem., Lat., *elementum*, a rudiment, beginning. A simple body—one that cannot be divided into two or more sorts of matter. But fifty-five are as yet known.

EL'EMENT, Phys., Lat., same etym. A simple, ultimate, constituent of a tissue. Two sorts of these (so called) elements are found in the animal body, *Organic*, such as fibrine, albumen, &c., and *Chemical*, such as oxygen, hydrogen, &c.

ELEVA'TION, Ast., Lat., *elevatio*, height. The elevation of the Pole, or of a Star, is its height above the horizon.

ELLIP'SIS, Geom., Gr., ελλειψις (*elleipsis*), wanting. A section of a cone by a plane passing obliquely through its two slanting sides. Sometimes written *ellipse*.

ELLIP'SOID, Geom., Gr., ελλειψις (*elleipsis*), ellipsis, and ειδος (*eidos*), form. A solid formed by the revolution of an ellipsis round one of its axes.

ELONGA'TION, Ast., Lat., *elongare*, to lengthen. The point in a planet's orbit which makes the greatest angle with the Sun as seen from the Earth.

EL'YTRA, Ent., Gr., ελυτρον (*elutron*), a sheath, or case. The wing-cases of coleopterous Insects, which enclose and protect the true wings (alæ) when at rest, they being folded up under them. They are found in all *Beetles*.

EMAR'GINATE, Bot., Mal., &c., Lat., *emarginare*, to cut out of the margin. Scalloped in the edge or margin. A term applied to Leaves, Shells, &c.

EM'BRYO, Bot., &c., Gr., εν (*en*), in, and βρυω (*bruō*), I grow. The earliest state of the existence of an organic body. In plants it consists of a short trunk, and a pair of rudimentary leaves.

EMER'GENCE, Opt., Lat., *emergere*, to emerge. That point of a transparent medium at which a transmitted ray leaves it.

EMER'SED, Bot., Lat., *emergo*, I rise from. Raised above water.

EMER'SION, Ast., Lat., *emergere*, to rise out of. The reappearance of a celestial body subsequent to an eclipse.

EMPETRA'CEÆ, Bot., Lat., *Empetros*, *Sea-Fennel*, from Gr., εν and πετρος, in the rocks. A natural Order of Plants, consisting of low, shrubby evergreens.

EMPYREU'MA, Chem., Gr., εμπυροω (*empuroō*), from πυρ (*pur*), fire, to burn. A peculiar disagreeable odour and acrid taste in animal and vegetable substances when burnt, owing to an oil developed by their decomposition.

EMUNC'TORY, Anat., Lat., *e*, and *mungere*, to drain off. Every organ which serves to remove noxious or useless matter.

ENAM'EL, Anat., *amel*, from Fr., *émail*. A hard, polished substance that invests all parts of the teeth above the neck or gum. Its hardness is owing to an excess of phosphate of lime.

ENARTHRO'SIS, Anat., Gr., εν (*en*), in, an αρθρωσις (*arthrōsis*), articulation. That sort of joint usually called ball and socket, formed by the head of one bone being received into a cavity in another, as is the case in the hip-joint.

ENCEPH'ALON, Anat., Gr., εν (*en*), in, and κεφαλη (*kephale*), the head. The entire contents of the cranium, Cerebrum, Cerebellum, &c.

ENCŒ'LIA, Anat., Gr., εν (*en*), and κοιλια (*koilia*), abdomen. The abdominal viscera, or entrails.

ENDEC'AGON, Geom., Gr., ἑνδεκα (*hendeka*), eleven, and γωνια (*gōnia*), angle. A regular geometrical figure with eleven angles and as many sides.

ENDEM'IC, Hyg., Gr., εν (*en*), in, and δημος (*demos*), the people. Diseases depending on some peculiarity of a particular locality, and confined within narrow bounds.

EN'DOCARP, Bot., Gr., ενδον (*endon*), within, or internal, and καρπος (*karpos*), fruit. The internal separable wall of a pericarp. In the peach, the hard shell which contains the seed is the endocarp.

EN'DOGENS, Bot., Gr., ενδον (*endon*), within, and γεινομαι (*geinomai*), to be born. Inside growers. The second great series of flowering Plants; so called because, instead of the new woody matter being deposited on the ***outside***, it is placed near the centre in or among the older tissues. The *Rattan, Indian Corn, Palms,* &c., are endogenous plants.

ENDOPLEU'RA, Bot., Gr., ενδον (*endon,*) within, and πλευρα (*pleura*), rib, and the membrane which lines the ribs. In vegetable organography, it is applied to the proper coat of the nucleus when it is attached to the seed.

ENDORHI'ZÆ, Bot., Gr., ενδον (*endon*), internal, and ῥιζα (*rhiza*), a root. A term applied to the radicle of endogenous plants where (and where only) it is enclosed in a sheath.

ENDOSMO'SIS, Phys., Gr., ενδον (*endon*), within, and ωσμος (*ōsmos*), impulse. A species of absorption or imbibition; so named by Dutrochet, because it consists in the filtration of fluids, from without inwardly, through the tissues. See *Exosmosis.*

ENDOSTO'ME, Bot., Gr., ενδον (*endon*), inner, and στομα (*stoma*), mouth. The orifice of the internal coat or secundine of the ovule.

ENEAN'DROUS, Bot., Gr., εννεα (*ennea*), nine, and ανηρ (*aner*), male. Flowers furnished with nine Stamens.

EN'GYSCOPE, Opt., Gr., εγγυς (*eggus*), near, and σκοπεω (*skopeō*), I look. A sort of Microscope.

ENNEACON'TÆDRA, Min., Gr., εννενηκοντα (*ennenekonta*), ninety, and ἑδρα (*hedra*), face. Crystals, so styled by Haüy, that present ninety facets.

ENNE'AGON, Geom., Gr., εννεα (*ennea*), nine, and γωνια (*gōnia*), angle. A geometric figure with nine angles and as many sides.

ENNEAPET'ALOUS, Bot., Gr., εννεα (*ennea*), nine, and πεταλον (*petalon*), petal. Flowers furnished with nine Petals.

EN'SIFORM, Anat., Lat., *ensis*, a sword, and *forma*, shape. A term applied to the inferior portion of the sternum, because it is pointed like a sword—the *Ensiform cartilage.*

ENTEROL'OGY, Anat., Gr., εντερον (*enteron*), intestine, and λογος (*logos*), a treatise. That branch of Anatomy which treats of the alimentary canal.

n. Gen. Dat. Voc. Ab. Acc.

ENTOMOL'OGY, Gr., Εντομον (*Entomon*), Insect, and λογος a treatise. That branch of Zoology which treats of Insects.

ENTOMOSTRA'CA, Crust., Gr., εντομος (*entomos*), cut, and οστρακον (*ostrakon*), a shell. The second general division of the Crustacea, so called because the crust, tegument, or shell, in the animals which compose it, is cut or divided into numerous segments. Some of them have upwards of one hundred articulated feet.

ENTOZO'A, Rad., Gr., εντερον (*enteron*), intestine, and ζωον (*zōon*), an animal. Intestinal worms. The second Class of Radiated Animals.

ENVERGU'RE, Orn. A purely French word, forming a convenient term expressive of the extent or spread of wing of Birds, or the distance from the tip of one wing to that of the other when fully expanded.

E'OCENE, Geol., Gr., ηως (*eōs*), dawn, and καινος (*kainos*), recent. A name applied by Mr. Lyell to the first of four periods during which he conceives the tertiary strata to have been deposited, so called, because, in the rocks of this period, a few fossils of existing species of shells are to be found, indicating the dawn of the creation of the present testaceous Mollusca.

E'PACT, Ast., Gr., επαγο (*epago*), to add. The annual epact is the excess of the solar above the lunar year, amounting to ten days, twenty-one hours, and eleven minutes, which time is thus added to the former.

EPHEM'ERIS, Ast., Gr., επι (*epi*), during, and ἡμερα (*hemera*), a day. A series of astronomical tables, showing for each day the position of the planets at meridian.

EP'ICARP, Bot., Gr., επι (*epi*), on, and καρπος (*karpos*), fruit. The outer wall of the pericarp. The skin of the Peach is an epicarp.

EP'ICYCLE, Ast., Gr., επι (*epi*), upon, and κυκλος (*kuklos*), a circle. A little orbit dependent on a greater, as that of the Moon on the Earth.

EPICY'CLOID, Geom., Gr., επι (*epi*), on, κυκλος (*kuklos*), circle, and ειδος (*eidos*), form. A curved line formed by the revolution of a point of the circumference of a circle revolving upon the convex or concave portion of another circle, that is, a sort of circle moving on another.

EPIDEM'IC, Hyg., Gr., επι (*epi*), upon, and δημος (*demos*), the people. Diseases not referrable to any known cause, and that extend through a great extent of country.

EPIDER'MIS, Anat., Mal., &c., Gr., επι (*epi*), upon, and δερμα (*derma*), the skin. The Cuticle or Scarf skin. The most external of all the layers. The same term is applied to the investing membrane of shells and plants.

EP'IDOTE, Min., Gr., επιδιδωμι (*epididōmi*), I increase. A mineral so called by Haüy, because one of the sides of the vase of the molecule of the crystal is longer than the other.

EPIGAS'TRIC, Anat., Gr., επι (*epi*), upon, and γαστηρ (*gaster*), the stomach. A term applied to various parts in the vicinity of the stomach, veins, arteries, &c., and to the region bounded above by the diaphragm, and below by an imaginary line about an inch above the umbilicus.

EPIGLOT'TIS, Anat., Gr., επι (*epi*), upon, and γλωττις (*glottis*). One of the five principal Cartilages of the Larynx. It closes the opening of the larynx at the moment of deglutition.

EPIG̦'YNOUS, Bot., Gr., επι (*epi*), upon, and γυνη (*gune*), female. Flowers in which the calyx, corolla, and stamens are inserted into, or are attached to the ovary.

EPIPET'ALOUS, Bot., Gr., επι (*epi*), upon, and πεταλον (*petalon*), petal. Flowers in which the stamens are inserted into the petals.

EPIPHYL'LOUS, Bot., Gr., επι (*epi*), upon, and φυλλον (*phullon*), a leaf. Any organ inserted on a leaf.

EPIPH'YSIS, Anat., Gr., επι (*epi*), upon, and φυω (*phuō*), I rise. A portion of a Bone separated for a time from the rest by a plate of cartilage.

EP'IPHYTES, Bot., Gr., επι (*epi*), upon, and φυτον (*phuton*), a plant. Plants which attach themselves by their roots to other plants; such, for instance, is the *Tillandsia* or Long Moss of the south.

EPIPLO'ON, Anat., Gr., επι (*epi*), upon, and πλεω (*pleō*), to float. The Omentum. A fold of the peritoneum which hangs like an apron before and above the small intestines.

EPISTO'MA, Ent., Gr., επι (*epi*), above, and στομα (*stoma*), mouth. The *clypeus* of Kirby, that part of the head of an Insect which is above the mouth.

EQUA'TION, Ast., &c., Lat., *æquare*, to equalize. An *absolute* equation is the sum of the optic and eccentric equations. The *annual* equation the difference between the mean and true anomaly of a planet; the equation of *time* the difference between apparent and mean time, or between the Sun's mean motion and right ascension, according to which chronometers are adjusted.

EQUA'TOR, Ast., Lat., *æquator*, the equator. An imaginary great circle of the Earth, corresponding with the equinoctial in the Heavens. It is represented on the terrestrial globe by a graduated circle midway between the two poles.

EQUATO'RIAL, Ast., see *Equator*. An instrument for the purpose of directing a telescope upon any celestial body of which the right ascension and declination are known, and for keeping such body in view, notwithstanding the diurnal motion.

EQUILAT'ERAL, Geom., Lat., *æquus*, equal, and *latus*, side. Having all sides equal.

EQUILIB'RIUM, Nat. Ph., Lat., *æquus*, equal, and *libro*, I level. The repose of moving bodies produced by the compensation of several acting forces.

E'QUINOX, Ast., Lat., *æquus*, equal, and *nox*, night. The precise time when the Sun enters into the *equinoctial points*, that is, the first degrees of *Aries* and *Libra*, where the ecliptic crosses the equator. There are two of these points. The first happens about the 20th of March, and is called the *Vernal equinox;* the second about the 23d of September, the *Autumnal equinox*.

EQUINOC'TIAL, Ast., Lat., *æquus*, equal, and *nox*, night. One of the great circles of the sphere—that part of the Heavens which is in the zenith of the equator. When the Sun enters this circle, the days and nights are equal all over the globe.

EQUISETA'CEÆ, Bot., Lat., *Equisetum*, Horse-tail, a plant so called. A natural Order of Plants. It includes the *Horse-tail*, or *Shave-Grass*, and similar genera.

EQUIV'ALENTS, Chem., Lat., *æquus*, equal, and *valens*, worth. The proportions in which different elements unite among themselves. They are represented by numbers, which represent quantities capable of exactly replacing each other in combination.

E'QUIVALVE, Mal., Lat., *æquus*, equal, and *valvæ*, valves. A term applied to such bivalve Shells as are symmetrical, or have both valves or shells of equal dimensions.

EREMACAU'SIS, Chem., Gr., ερημια (*eremia*), waste, and καιω (*kaiō*), fut. καυσω (*kausō*), I burn. A term applied by Liebig to the slow combustion or oxidation of organic matters in air.

EREPETOL'OGY, Zool., see *Herpetology*.

ERICA'CEÆ, Bot., Lat., *Erica*, Heath, Furze. A natural Order of Plants. It contains the Heaths, &c.

ERIOCAULONA'CEÆ, Bot., Gr., εριον (*erion*), wool, and καυλος (*kaulos*), a stem. A natural Order of Plants, all marsh or aquatic genera.

ERIOM'ETER, Opt., Gr., εριον (*erion*), wool, and μετρον (*metron*), measure. An optical instrument for measuring minute fibres and particles by giving the diameter of any one of the coloured rings they produce.

ERO'DED, Nat. Hist., Lat., *erodo*, I gnaw. Applied to any body that has the edges jagged, as if gnawed by the teeth of some small animal.

ES'CULENT, Hyg., Lat., *esculentus*, eatable, nourishing. Parts of organic bodies fit for food.

ESO'CES, Icth., Gr., Ισοξ (*Isox*), the Pike. The second Family of abdominal malacopterygious Fishes. It includes the *Pikes*, *Gar-Fish*, *Flying-Fish*, &c.

ETÆ'RIO, Bot., Gr., ἑταιρεια (*hetaireia*), a friendly union. An aggregate fruit with distinct ovaries and indehiscent pericarp. The Strawberry is an etærio.

E'THAL, Chem., from *eth*, the first syllable of ether, and *al* or *ol*, the last of alcohol. A peculiar substance produced from Spermaceti when saponified by an alkali.

E'THER, Chem., Gr., αιθω (*aithō*), to burn, or inflame. An oxide of ethyl, a light, transparent, fragrant and volatile liquid; also called sulphuric ether, from the mode of obtaining it.

ETHE'REAL, Nat. Ph., Gr., αιθηρ (*aither*), air. Any very subtle fluid like air.

ETH'MOID, Anat., Gr., ηθμος (*ethmos*), a sieve, and ειδος (*eidos*), shape. Sieve-like. A term applied to one of the Bones of the face, so called from its light, spongy tissue.

ETHU'LE, or **ETHYL'**, Chem., Gr., αιθηρ (*aither*), air, or ether, and ὑλη (*hule*), principle. A hypothetical radicle existing in ether and its compounds.

EU'CHLORINE, Chem., Gr., ευ (*ev*), very, and χλωρος (*chlōros*), green. A term applied by Davy to the oxide of Chlorine on account of its deep yellow-green colour.

EUPEP'SIA, Hyg., Gr., ευ (*eu*), good, or well, and πεπτω (*peptō*), I digest. Healthy digestion—the reverse of *dyspepsia.*

EUPHORBIA'CEÆ, Bot., Lat., *Euphorbia*, the plant so called, in honour of an ancient Physician, Euphorbius. A natural Order of Plants.

EU'PION, Chem., Gr., ευ (*eu*), very, and πιων (*piōn*), greasy. A colourless limpid liquid that stains paper like oil, and is obtained from animal tar.

EUPO'DA, Ent., Gr., ευ (*eu*), well, or good, and πους (*pous*), foot. The fifth Family of coleopterous Insects; so called because the posterior femurs, in many, are very large or broad. The species have no common names.

EUSTA'CHIAN, Anat., *Eustachius*, a celebrated ancient Anatomist. A term applied to the air-tube or duct of the tympanum, and to a valve situated at the opening of the inferior vena cava into the right auricle of the heart.

EVEC'TION, Ast., Lat., *evectum*, borne aside. The angle of evection is an inequality in the motion of the Moon when at or near her quadratures, which removes her from a line drawn through the centres of the Earth and Sun, so as to make an angle with that line of about 2° 51′.

EXALBU'MINOUS, Bot., Lat., *ex*, and *albumen*. Vegetable albumen not being an essential part of a seed, it is often wanting, as in those of all cruciferous plants. Hence they are called exalbuminous seeds.

EXCRE'TION, Phys., Lat., *ex*, from, and *cernere*, to separate. That process by which useless or noxious matters are removed from the body.

EX'CRETORY, Phys., Lat., *ex*, from, and *cernere*, to separate. A term applied to ducts of glands that convey their secretions from them.

EX'ERCISE, Hyg., Gr., εξεργεω (*exergeō*), to labour. Every motion of every organ of the body, arising from the contraction of the muscles.

EXHA'LANTS, Anat., Lat., *exhalare*, to throw off, or exhale. A supposed system of vessels (for they have never been seen) distributed throughout the body—their (supposed) function being that of removing superfluous matter, or conveying it somewhere else.

EXHALA'TION, Phys., Lat., *exhalare*, to exhale. Perspiration, or the insensible moisture deposited upon the surface of the body by exosmosis, or in the cavities. It is for this reason divided into external and internal.

EX'OGENS, Bot., Gr., εξ (*ex*), out, and γεινομαι (*geinomai*), to be born. Outside growers. Plants in which the new woody matter is deposited on the exterior of the old. All the trees of cold climates are exogenous.

EX'OLETE, Mal., Lat., *exoleo*, I grow old, worn out. Faded and worn. A termapplied to Shells, or parts of Shells.

EXORHI'ZÆ, Bot., Gr., εξ (*ex*), out, and ῥιζα (*rhiza*), a root. The Radicle of Dicotyledons having no sheath, are thus named. See *Endorhizæ*.

EXOSMO'SIS, Phys., Gr., εξ (*ex*), out of, and ωσμος (*ōsmos*), impulse. The reverse of Endosmosis, or Endosmose, as it is sometimes called. A sort of absorption by filtration from within outwardly.

EXOSTO'ME, Bot., Gr., εξ (*ex*), external, and στομα (*stoma*), mouth. The orifice of the Primine or external of the two envelopes of the seed of a Plant. See ***Endostome***.

EXOTHE'CIUM, Bot., Gr., εξω (*exō*), without, or external, and θηκη (*theke*), receptacle. The envelope of an Anther.

EXOT'IC, Bot., Gr., εξωτικος (*exōtikos*), foreign, from εξω (*exō*), outside. Plants that are not indigenous, or that grow in other countries.

EXPER'IMENT, Chem., &c., Gr., πειραω (*peiraō*), trial, attempt, &c. The basis of all chemical science, which is emphatically a science of experiment, for it is in this way only that its problems are solved.

EXSERT'ED, Bot., Lat., *exertus*, drawn out. Projecting beyond other parts.

EXSTIP'ULATE, Bot., Lat., *ex*, without, and *stipula*, stipules. Without stipules.

EXTEN'SOR, Anat., Lat., *ex*, from, and *tendere*, to draw. A term applied to a variety of Muscles which serve to extend the parts into which they are inserted. They are the antagonists of the flexors.

EX'TRACT, Chem., Lat., *ex*, out, and *trahere*, to draw. Extractive matter of the Chemists is a peculiar immediate principle obtained from organic bodies.

EXTROR'SE, Bot., Gr., εξ (*ex*), outwards, and τρεπω (*trepō*), to turn. The anther of a plant sometimes faces outward, or from the pistil, and hence is said to be extrorse.

EXU'VIUM, or **EXU'VIÆ**, Lat., *exuvium*, a cast-off garment. First applied by the Roman Naturalists to the shed-skin of a serpent—now to the external covering of every animal that periodically moults, and to that of Insects until they become perfect.

FACE, Anat., Lat., *facies*, face. The anteri inferior part of the head. It consists of fourteen of the twenty-two bones which compose the head.

FA'CIAL, Anat., Lat., *facies*, face. Relating to the face, as facial angle, nerve, artery, &c.

FAC'ULÆ, Ast., Lat., *facula*, a little torch. Certain bright spots which occasionally appear on the Sun's disc.

FAL'CATE, Bot., Lat., *falx*, a sickle. Bent on one side—sickle-shaped.

FAL'CATED, Ast., Lat., *falx*, a sickle. The crescent-like appearance presented by the enlightened portions of a planet.

FAL'CIFORM, Anat., Lat., *falx*, a sickle, and *forma*, shape. Sickle-shaped.

FALX, Anat., Lat., *falx*, a sickle. A term applied to folds of membranes, but chiefly to those of the dura mater, the *F. major*, and *F. minor*.

FAM'ILIES, Bot., &c., Lat., *familia*, a family. Groups of closely allied genera. One of the sub-divisions of a system, or method.

FARI'NA, Chem., Lat., *far*, corn. Flour, meal.

FARINA'CEOUS, Hyg., Lat., *far*, corn. Mealy—a term applied to all vegetable bodies containing farina.

FAS'CIÆ, Anat., Lat., *fascis*, a bundle. An aponeuretic expansion or Membrane which binds muscles together. It receives various names, according to the position in which it is found.

FAS'CIÆ, Ast., Lat., *fascia*, a band. Bright stripes or belts observable on the discs of some of the planets, Jupiter particularly.

FAS'CICLED, Bot., La., *fasciculus*, a little bundle. Leaves of an axillary branch which is so short that their bases are in contact. The Leaves of the *Pine* are fascicled.

FASCIC'ULATED, Bot., Lat., *fasciculus*, a bundle. A term applied to the thickened fibrous divisions of a root, as those of the Dahlia.

FASCIC'ULUS, Anat., Lat., *fasciculus*, from Gr., φακελλος (*phakellos*), a little bundle. A number of muscular fibres united by cellular substance into a bundle, or fasciculus, which being united in like manner with others, form the entire muscle.

FASTIG'IATE, Bot., Lat., *fastigium*, height, top. Level-topped.

FAT, Anat.. see *Adeps—Adipose.*

FAU'CES, Anat., Lat., *faux*, the throat—pharynx. The posterior portions of the mouth.

FAUN'A, Zool., Lat., *Fauni*, the Satyrs of the Greeks. A description of the Animals of a country, just as a *Flora* is that of its plants.

FAUX, Mal., Lat., *faux*, throat. All that is visible of the first cavity of a chambered Shell.

FAVO'SE, Bot. Lat., *favus*, a cell of a honey-comb. Deeply pitted.

FEC'ULA, Chem., Lat., *fæx*, Lees. An immediate principle of all the Cerealia and of some other plants, very abundant in the potato—well known as Starch, Arrow-root, &c.

FEL'SPAR, Min., Ger., *feld*, field, and *spath*, spar. A widely distributed mineral, of various shades of colour, that enters into the composition of Granite, and constitutes the base of some other rocks.

FEM'ORAL, Anat., Lat., *femoralis*, relating to the thigh. A term applied to various organs of that part of the extremity, such as femoral artery, vein, &c.

FE'MUR, Anat., *femur*, thigh bone. The second portion of the inferior extremity.

FENES'TRA, Anat., Lat., *fenestra*, a window. A term applied to foramina or holes in the posterior wall of the tympanum; one of them looks into the vestibule, and the other into the cochlea. Hence the terms *fenestrated*, *fenestral.*

FI'BRE, Anat., Bot., Lat., *fibra*, a thread or filament. Animal fibres are organic elements, and are usually considered of three sorts, cellular, nervous, and muscular.

FI'BRIN, Chem., Lat., *fibra*, a filament, whence Fr., *fibrine.* A solid, white, elastic substance, an immediate animal principle, found abundantly in the blood, and constituting the base of all muscular flesh.

FI'BRO-CAR'TILAGE, Chem., Lat., *fibra*, fibre, and *cartilago*, cartilage. A flexible, strong, organic tissue, intermediate as to properties to the desmoid and cartilaginous tissues. It is found in various forms in different parts of the animal body.

FIB'ULA, Anat., Lat., *fibula*, a clasp. One of the two bones of the leg placed alongside of the other like a splint.

FIL'AMENT, Anat., Lat., *filum*, a thread. Synonymous with fibre.

FIL'AMENT, Bot., same etym. The stalk that supports the anther of a flower.

FIL'ICES, Bot., Lat., *Filix*, Fern. A natural Order of Plants. It is composed of the Ferns, Brake, Maidenhair, &c.

FIL'IFORM, Nat. Hist., Lat., *filum*, a thread, and *forma*, shape. Any part of a body that is long and slender, or thread-like.

FIM'BRIATED, Anat., Bot., Lat., *fimbria*, fringe. Fringed.

FISSIP'AROUS, Rad., Lat., *findo*, I divide, and *pario*, I produce. The mode of production by spontaneous or artificial separation of parts that marks certain radiated animals. The *Hydra*, for instance, being cut to pieces with a knife, each piece soon becomes a perfect animal.

FISSIROS'TRATÆ, Orn., Lat., *fissum*, cleft, split, and *rostrum*, a bill. Split-bill'd. The second Family of Passerine Birds, so called from the extent of the opening of the bill. It includes the Swallows, Goatsuckers, &c.

FIS'SURE, Anat., Lat., *fissum*, cleft. A long and narrow opening in a bone, as the *glenoid fissure* of the Temporal bone.

FISTULA'RIA, Icth., Lat., *fistularius*, having a pipe. The fifteenth Family of Acanthopterygious Fishes; so called because they have a tubular snout.

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FIS'TULOUS, Bot., Lat., *fistula* (Gr., φυσαω, to inflate), a pipe, or reed. Hollow.

FIX'ED, Ast., Lat., *figere*, to fasten, or fix. A term applied to Stars, properly so called, because they, unlike planets and comets, do not appear to change their relative position.

FIX'ED, Chem., Lat., *figere*, to fasten. A body that cannot be volatilized.

FLABEL'LIFORM, Bot., Lat., *flabellum*, a fan, and *forma*, shape. Fan-shaped.

FLEX'ION, Phys., Lat., *flexio*, the act of bending. The opposite to extension.

FLEX'OR, Anat., Lat., *flecto*, I bend. A muscle that bends; the antagonist of an *extensor*.

FLEX'UOUS, Mal., Lat., *flexuosus*, tortuous. Zigzag—with winding angles.

FLO'RA, Bot., Lat., *flos*, a flower. A description of all the Plants of any country.

FLO'RETS, Bot., Lat., dimin., of *flos*, a flower. The flowers of a Capitulum which, small as they are, are as perfectly formed as those that are larger.

FLOR'ULA, Bot., Lat., dimin., of *Flora*. A little Flora, or a description of the Plants of a State, County, &c.

FLOW'ERLESS, Bot. The second great division of Plants, (the Cryptogamous Plants of Linnæus,) so called from their not producing flowers.

FLOW'ERS, Bot., Lat., *flos*, a flower. Strictly speaking, a flower is a transformed leaf-bud, its situation always corresponding with that of ordinary buds. The transformation is requisite (where it exists at all) to develope the seed.

FLU'IDS, Anat., Lat., *fluere* (Gr., φλυειν), to flow. The fluids of the animal body are numerous, and constitute nine-tenths of the whole weight. They may be divided into three classes—the blood, those that flow to the blood, and those which are formed from it.

FLU'ORINE, Chem., from *fluor-spar*, a mineral chemically known as fluoride of Calcium. Fluorine is a principle known to exist, but it is not certainly known to have been insulated.

FLU'VIATILE, Mal., Lat., *fluvius*, a river. Belonging to a river.

FO'CUS, Opt., Lat., *focus*, a hearth. That point behind a lens to which all the refracted rays converge.

FOLIA'CEOUS, Bot., Lat., *foliaceous*, leaf-like. Thin, membranous, life a leaf.

FOL'LICLE, Anat., Lat., *folliculus* (Gr., φυλλις), a little sac. See *Crypta*, of which it is a synonyme.

FOL'LICLE, Bot., Lat., *folliculum*, a purse. A fruit formed of a single carpel, opening as in the Larkspur.

FORA'MEN, Anat., Lat., *foramen*, a hole. An opening into or through bones for the transmission of blood-vessels, nerves, &c.

FO'RE-ARM, Anat. That portion of the superior extremity extending from the elbow to the hand.

FORMA'TION, Geol., Lat., *forma*, form, arrangement. An assemblage of Rocks which have some character in common, such as age, composition, or origin.

FOR'MULA, Chem., Lat., *forma*, a form. A collocation of symbols, expressive of combination, an admirable invention of modern chemists by which the composition of compounds is seen at a glance.

FORMY'L, Chem., Lat., *Formica*, an Ant. The radicle of formic acid; so called because first obtained by Geplen from the *Formica rufa*, or red Ant. It is now prepared artificially.

FOR'NIX, Anat., Lat., *fornix*, an arch, a vault. A body of nervous matter in the brain, forming a sort of arch resting or terminating anteriorly on a process of itself called the anterior *crus cerebri*, and posteriorly on two similar ones called the posterior *crura cerebri*.

FOR'NIX, Mal., same etym. The concavity under the umbo of a shell.

FOS'SA, Anat., Lat., *fossa*, a pit. A depression in a bone.

FOS'SIL, Geol., Lat., *fossilis*, in a pit, buried. A body, vegetable or animal, that has been buried for ages by natural causes.

FOSSILIF'EROUS, Geol., Lat. *fossilis*, a fossil, and *ferre*, to bear. Formations or Strata that contain fossils.

FOSSO'RIAL, Nat. Hist., Lat., *fodio*, I dig. A term applied to an Animal of any class that burrows, or seeks its food in the earth. Thus the Mole and Gryllotalpa are both fossorial.

FOVIL'LÆ, Bot., Lat., *foveo*, I warm. Minute globular or oblong bodies, from the 4,000 to 30,000th of an inch in diameter, which form the fluid that fills the pollen of flowers.

FRE'NUM, Anat., Lat., *frenum*, a bit, bridle. A membranous fold found in various parts of the body, which serves to restrict motion.

FRIC'TION, Nat. Ph., Lat., *frico*, I rub. "A force," says Playfair, "which destroys motion, but never generates it." Notwithstanding this definition is true, friction is not only useful in Mechanics, but essential.

FROND, Bot., Lat., *frons*, a leaf or bough. A term applied to the leaves of cryptogamous Plants, which seem, leaf and bough, or stem, combined.

FRONT'AL, Anat., Lat., *frontalis*, relating to the forehead. A term applied to various parts in and near the *O. frontis*, or forehead.

FRUGIV'OROUS, Nat. Hist., Lat., *fruges*, fruit, and *voro*, I eat. Animals so called that live chiefly on fruit.

FRUIT, Bot., Lat., *fructus*, fruit. This word, in Botanic language, has a very extensive meaning. It consists of the pericarp and the seeds it encloses—all mature pistils of whatever form, size, colour, or texture, are fruits.

FRUS'TUM, Geom., Lat., *frustum*, a fragment. A piece cut off from any regular figure.

FUL'MINATES, Chem., Lat., *fulminare*, to thunder. A variety of products, thus named from their detonating properties. They all contain a bibasic acid called *fulminic*.

FUMARIA'CIÆ, Bot., Lat., *Fumaria*, the plant called Fumitory A natural Order of Plants. A small order, the flowers remarkable for their singularity—the *Dutchman's-breeches*, for instance.

FUNC'TION, Phys., Lat., *fungor*, I act. The action of an organ or apparatus.

FUN'GI, Bot., Lat., *Fungus* (Gr., Σφογγος, Sponge), a Mushroom. A natural Order of Plants. It comprises various genera allied to the mushroom, and among them the delicious *Tuber cibarium* or Truffle.

FUNGIC'OLÆ, Ent., Lat., *Fungus*, a Mushroom, and *colo*, I love. The first Family of trimerous Coleoptera. They are so called from their habits, living in the Lycoperdons, &c. Insects with no common names.

FUNIC'ULAR, Anat., Lat., *funis*, a cord. Cord-like. A term applied to ligaments which resemble cords by way of distinguishing them from those which resemble sacs. See *Capsular.*

FUNIC'ULUS, Bot., Lat., *funis*, a cord. A short stalk which attaches the ovule of a Plant to the placenta.

FU'SIFORM, Bot., Mal., *fusus*, a spindle, and *forma*, shape. Spindle-shaped. Roots so called from their shape. The same term is applied to Shells.

GAD'ITES, Icth., Gr., Γαδυς (*Gadus*), a fish so called by the Greeks, supposed to be a modern Gadus. The third Order of subrachiate malacopterygious Fishes. It includes the *Cod*, *Blenny*, *Haddock*, *Hake*, &c.

GAL'AXY, Ast., Gr., γαλα (*gala*), milk, and κυκλος (*kuklos*), circle. The milky way. A white track which appears to encompass the Heavens, or to form a white circle. This zone consists of a number of celestial bodies. It obtained its name of Γαλαξιας κυκλος, or *Milky Way*, from the poetical idea of the infant Hercules rejecting the milk of Juno, which, falling on the Heavens, streamed down the concave.

GA'LEÆ, Ent., Lat., *galea*, a helmet. Two small lobes which terminate the extremity of the *palpi* in certain Insects. In the *Orthoptera*, terminating the maxillæ, or jaws.

GA'LEA, Bot., Lat., *galea*, a helmet. A term applied to the arched lip of the corolla of certain Flowers.

GALE'NA, Min., γελαω (*gelaō*), I shine. Native sulphuret of lead.

GALIN'EA, Min., Gr., γελαω (*gelaō*), I shine. The tenth Order of the Halinea, or second Class of Minerals. It contains ores of *Copper*, *Silver*, &c. &c.

GAL'LIC, Chem., Lat., *Galla*, a Gall-nut. An acid so called, obtained from galls and other vegetable astringents.

GALLIC'OLA, Ent., Lat., *Galla*, a Gall-nut, and *colo*, I inhabit. A Family of pupiparous Hymenoptera, many of which deposit their eggs in plants producing the excrescences called Gall-nuts, in which their larvæ live and become perfect insects. The *Cynips* is one of them.

GALLINA'CEÆ, Orn., Lat., *Gallus*, the Cock. The fourth Order of Birds; so called from the common Cock and Hen. It includes most of our Poultry, and a considerable number of birds called Game.

GALLINSEC'TA, Ent., Lat., *galla*, a gall-nut, and *insectum*, insect. The third Family of hemipterous Insects; so called because the females of the species which compose it become fixed to bark of trees, and gradually increase to such a size that they resemble gall-nuts. They all form the one genus, *Coccus*.

GAL'VANISM, Nat. Ph., *Galvani*, Professor of Anatomy at Bologna. The apparent evolution of electricity by the contact of different metals. The phenomena of voltaic electricity.

GALVANOM'ETER, Nat. Ph., *Galvanism*, q. v., and μετρον (*metron*), a measure. An instrument invented for the purpose of ascertaining the presence of electric currents by their action on the magnetic needle.

GAMMARI'NA, Crust., Lat., *Gammarus*, or *Cammarus*, a Lobster. A Family of amphipodous Crustacea, (*Locusta* of *Cuvier*,) of which the *Sand-hopper*, a Scyllarus, is the type. The Lobster belongs to another division.

GAMOPET'ALOUS, Bot., Gr., γαμος (*gamos*), nuptials, and πεταλον (*petalon*), a leaf or petal. United petals. A term applied to Flowers of which the petals are united.

GAMOSEP'ALOUS, Bot., Gr., γαμος (*gamos*), nuptials, and Lat., *sepes*, a hedge. A term applied to sepals when they are united, as in the common *Phlox*.

GANG'LION, Anat., Gr., γαγγλιον (*gagglion*), a knot. Small obround masses of nervous matter found along the nerves. Their function is not known.

GANGLION'IC SYS'TEM, Anat., see *Ganglion*. The great sympathetic nerve—a double nervous cord extending from within the carotid foramen of the temporal bone, on each side, to the sacrum, having a ganglion opposite each intervertebral space, and communicating with each other by plexus.

GAR'NET, Min., It., *Garnata* from the Lat., *Granatus*, Garnet. A well known Mineral, one species of which, transparent and red, is called precious.

GAS, Chem., A. S., *gast*, Ger., Geiſt (*Geist*), Swed., *Gast*, Dut., *geest*, spirit, or breath. A word invented by the Chemists, possibly by Van Helmont, and applied to all permanently elastic fluids, or airs, differing from atmosphere.

GASTEROP'ODA, Icth., Gr., γαστηρ (*gaster*), abdomen, and πους (*pous*), foot. The third Class of the Mollusca; so called because their foot is attached to the abdomen, as in the *slug*.

GAS'TRIC, Anat., Gr., γαστηρ (*gaster*), the stomach. Relating to the stomach—variously applied, as *gastric juice*, *gastric nerves*, &c.

GASTROCH'ÆNOUS, Mal., Gr., γαστηρ (*gaster*), abdomen, and χαινω (*chainō*), I gape. Applied to those bivalve Testacea in which there is a large hiatus or opening between the closed valves.

GASTROCNE'MIUS, Anat., Gr., γαστηρ (*gaster*), abdomen, and κνημη (*kneme*), leg. A muscle that forms the calf of the leg, so called from its projection.

GASOM'ETER, Chem., A. S., *gast*, gas, and Gr., μετρον (*metron*), measure. An instrument for receiving and measuring gas.

GECCO'TIDA, Herp., *gecko!* the cry of the animal—the Ασκαλαβωτης (*Askalabōtes*)—of the Greeks. The fourth Family of Saurians, or lizard-like Reptiles.

GELATINO'SI, Rad., Gr., γελα (*gela*), jelly. The second Order of the fourth Class of radiated Animals. Their body is a conoidal jelly, the cavity replacing the stomach of higher animals.

GEM'INATE, Bot., Lat., *geminatus*, doubled. In pairs.

GEMMIP'AROUS, Rad., Lat., *gemma*, a bud, and *pario*, I produce. Reproducing by buds; a mode not uncommon among radiated Animals.

GENIC'ULATE, Bot., Lat., *geniculus*, a bend. Bent at one or more points like an elbow.

GE'NIO, Anat., Gr., γενειον (*geneion*), the chin. A term designating various muscles arising from the lower jaw, such as the *Genio-Glossus*, *Genio-Hyoideus*, and *Genio-Pharyngeus*.

GENTIANA'CEÆ, Bot., Gr., Γεντιανη (*Gentiane*), Gentian. A natural Order of Plants, all of which are remarkable for possessing a pure, bitter principle.

GE'NUS, Nat. Hist., Gr., γενος (*genos*), a race, or kind. A compared group of neighbouring beings—species—which resemble each other more closely than those of any other group. An artificial sub-division of the natural method. See *Species*.

GEOCEN'TRIC, Ast., Gr., Γη (*Ge*), the Earth, and κεντρον (*kentron*), the centre. The situation in which planets are seen from the Earth with respect to their latitude and longitude.

GEOCORI'SÆ, Ent., Gr., Γη (*Ge*), the Earth, and Κορις (*Koris*), a Bug. The first Family of hemipterous Insects. It includes all the terrestrial *Cimices*—Insects resembling the common Squash-bug, but which have no vulgar names.

GE'ODE, Min., Gr., γεωδης (*geōdes*), terrestrial, from Γη (*Ge*), the Earth. Obround, cavernous minerals, frequently containing crystals in the cavity.

GEOG'NOSY, Nat. Hist., Gr., Γη (*Ge*), the Earth, and γνωσις (*gnōsis*), knowledge. A knowledge of the Earth.

GEOL'OGY, Gr., Γη (*Ge*), the Earth, and λογος (*logos*), a treatise. That science which investigates the history of the crust of the Earth.

GEOM'ETRY, Gr., Γη (*Ge*), the Earth, and μετρον (*metron*), measure. The science which treats of quantity, extension, and magnitude, abstractedly considered. It is either theoretical or practical.

GERANIA'CEÆ, Bot., Gr., Γερανιον (*Geranion*), Geranium. A natural Order of Plants—well known, and usually strongly scented Shrubs.

GERM, Bot., Lat., *Germen*, a Bud. The Bud—its growing point.

GERMINA'TION, Bot., Lat., *germinatio*, growing from the seed.

GESTA'TION, Hyg., Lat., *gestatus*, carried. Passive exercise, such as that obtained by riding, swinging, navigation, &c.

GIB'BOUS, Ast., Bot., Mal., Lat., *gibba*, a hump. The deformed appearance of the Moon (from the Earth) from her first quarter to the full, and thence to her last quarter. In Botany and Malacology, bent on one side—deformed.

GIN'GLYMOID, Anat., Gr., γιγγλυμος (*gigglumos*), a hinge, and ειδος (*eidos*), shape. Hinge-like. Applied to joints in which the motion approaches that of a hinge.

GIN'GLYMUS, Anat., Gr., γιγγλυμος (*gigglumos*), a hinge. An articulation in which the motion is strictly that of a hinge.

GLA'BROUS, Bot., Mal., Lat., *glaber*, smooth, without hair. Smooth.

GLAÇ'IERS, Geol., Fr., *glace*, ice, or *glacière*, ice-house. Immense accumulations of Ice, so called, that form on the peaks and sides of high mountains, and in the upper valleys between them.

GLAND, Anat., Gr., Γλανος, for Γαλανος, (*Glanos*), an Acorn. Applied by Anatomists to organs varying in size, colour, &c., which separate the *secretions* from the blood—the liver, for instance, which secretes the bile.

GLAU'COUS, Bot., Gr., γλαυκος (*glaukos*), sea-green. Covered with a grayish powder, which, mingling with the green of the plant, gives it a sort of sea-green hue.

GLEN'OID, Anat., Gr., γληνη (*glene*), a cavity in a bone, and ειδος (*eidos*), shape. A shallow cavity which receives another bone, or resembles one. A fissure, so called, in the temporal bone.

GLI'RES, Mam., Lat., *Glis*, the *Dormouse*. A Linnæan term now superseded by *Rodentia*, q. v.

GLOB'ULE, Anat., Lat., *globulus*, a little globe or spheroid. Applied, in Anatomy, to the corpuscles of the blood, which, although they vary from circular to elliptical in different genera, are not exactly spheroidal.

GLOS'SA, Anat., Gr., γλωσσα (*glōssa*), the tongue. A muscular appendage of the mouth—the organ of speech, assisting also in deglutition.

GLOSSOL'OGY, Nat. Hist., Gr., γλωσσα (*glōssa*), tongue, and λογος (*logos*), a treatise. Synonymous with Terminology. That branch of a science which explains the meaning and application of terms used in it.

GLOT'TIS, Anat., Gr., γλωττις (*glōttis*), from γλωττα (*glotta*), the tongue. The glottis or opening of the larynx; so called because the slit was supposed to be shaped like a little tongue.

GLUCI'NUM, Chem., Gr., γλυκυς (*glukus*), sweet. This metal is obtained from its oxide, called *Glucina*, from the sweet taste of its salts. Glucina is a rare earth, but forms about 13⅔ per cent. of the Emerald.

GLUME, Bot., Lat., *gluma*, a husk, or little skin which envelopes a grain. The external Bracts of the flowers of the Gramineæ.

GLU'TEAL, Anat., Gr., γλουτος (*gloutos*), the buttock. A term variously applied to muscles, nerves, &c.

GLU'TEN, Chem., Gr., γλοιος (*gloios*), glue. An immediate vegetable principle—a sort of vegetable glue found in most plants, combined with fœcula, &c., in all the Cerealia.

GLYP'TODON, Mam., Gr., γλυφω (*gluphō*), I carve, and οδους (*odous*), tooth. An extinct fossil Armadillo equal to the Rhinoceros in size, and with longitudinally fluted teeth, whence the name.

GNATHOTH'ECA, Orn., Gr., γναθος (*gnathos*), a jaw, and θηκη (*theke*), a sheath. The horny covering of the mandibles (or jaws) of Birds.

GNEISS, Min., Ger. *gneiss*, a miner's term. A sort of *stratified* Granite, consisting, like granite, of felspar, quartz, and mica.

GNO'MON, Ast., Gr., γινωσκω (*ginōskō*), I know. An instrument used by the ancients for marking time by a shadow. The point of a sun-dial which represents the axis of the Earth.

GOBIOI'DES, Icth., Gr., Κωβιος (*Kōbios*), a Gudgeon, and ειδος (*eidos*), shape. The twelfth Family of acanthopterygious Fishes.

GOMPHO'SIS, Anat., Gr., γομφος (*gomphos*), a nail. That sort of immovable articulation exhibited in the connection of the teeth with the jaws into which they seem to be received like nails in holes.

GONIOM'ETER, Min., Gr., γωνια (*gōnia*), angle, and μετρον (*metron*), measure. An instrument used by Mineralogists for measuring angles of crystals.

GRALLATO'RIÆ, Orn., Lat., *grallatorius*, walking on stilts. The fifth Order of Birds, so called from their generally long, slender legs. It includes the Storks, Cranes, and what are called *Waders* and *Shore-Birds*.

GRAMINA'CEÆ, Bot., Lat., *gramen*, grass. A natural Order of Plants, consisting of the various *Grasses*. It is the largest and most important of the whole series, including not merely grasses popularly so called, but Rice, Indian Corn, Wheat, Rye, Barley, &c.

GRAMINIV'OROUS, Nat. Hist., Lat., *gramen*, grass, and *voro*, I eat. Animals, so called, that live on grass, leaves, &c.

GRAN'ITE, Min., Lat., *granum*, a grain. An igneous Rock, composed, like gneiss, of felspar, quartz, and mica, but not stratified, being formed usually in amorphous masses of cohering granules, whence the name.

GRANIV'OROUS, Nat. Hist., Lat., *granum*, a grain, and *voro*, I eat. A term indicative of the nature of the food of certain Birds, &c., which live on the seeds of plants or grain.

GRAU'WACKE, Min., Ger., *grau-wacké*, gray rock. A sedimentary Rock composing the primary fossiliferous strata of modern Geologists.

GRAVITA'TION, Ast., &c., Lat., *gravitas*, weight. See *Attraction.*

GRAV'ITY, Nat. Ph., Lat., *gravitas*, weight. Specific gravity is the relation between the *bulk* of a body and its *weight.*

GROSSULA'CEÆ, Bot., Lat., *grossus*, thick. A natural Order of Plants. It contains the Gooseberry, Currant, &c.

GUM, Chem., Gr., κομμι (*kommi*), gum. A well known immediate vegetable principle. The gum-arabic of commerce is the product of one of the Mimosæ.

GYMNAS'TICS, Hyg., Gr., γυμναζω (*gumnazō*), I exercise. Various sorts of bodily exercise intended to develope the organs and keep them in health. That branch of Hygiene which treats of exercise.

GYM'NODONTS, Icth., Gr., γυμνος (*gumnos*), bare, and οδους (*odous*), tooth. A Family (*Gymnodontes*) of plectognathic Fishes, so called because their protruding jaws are covered with a layer of a sort of ivory, answering the purposes of teeth.

GYMNOSPER'MIA, Bot., Gr., γυμνος (*gumnos*), naked, and σπερμα (*sperma*), seed. The first Order of the fourteenth Class (Didynamia) of the Linnæan system. The seeds, however, are not naked, the achenium-like fruits having been mistaken for simple and naked seeds.

GYMNOSPER'MOUS, Bot., see *Gymnospermia.* Plants having naked seeds. Such are the Coniferæ and the Cycadaceæ.

GYNAN'DRIA, Bot., Gr., γυνη (*gune*), female, and ανηρ (*aner*), male. The twentieth Class of Plants in the Linnæan system, so called because the stamens adhere to the pistil.

GYNAN'DROUS, Bot., see *Gynandria.* Plants in which the pistils adhere to the stamens.

GY'NOBASE, Bot., Gr., γυνη (*gune*), female, and βασις (*basis*), base. The axis of the ovary of the Geraniaceæ.

GYNŒ'CIUM, Bot., Gr., γυναικειον (*gunaikeion*), the females' apartment. The pistillate system of a Flower.

GYPOGER'ANUS, Orn., Gr., Γυψ (*Gups*), a Vulture, and Γερανος (*Geranos*), a Crane. A name given by Illiger to a singular bird, now best known as the *Serpentarius*, or Snake-eater, of Cuvier. It is also called the *Secretary*.

GYP'SUM, Min., Gr., Γυψος (*Gupsos*), from Γη (*Ge*), the Earth, and ἑψω (*hepsō*), to bake, as if it were baked earth. Crystallized sulphate of lime.

HÆM'ATIN, Chem., Gr., αἱμα (*haima*), blood. The colouring principle of the Blood; also of the Logwood.

HÆMAT'OSIN, Chem., Gr., αἱμα (*haima*), blood. One of the two most characteristic principles of the blood. It is obtained from the globules, is of a dark brown colour, and, by incineration, yields a quantity of peroxide of iron. (?)

HÆMATO'SIS, Phys., Gr., αἱμα (*haima*), blood. The conversion of chyle and venous blood into arterial blood by the act of respiration.

HÆMATOX'YLIN, Chem., *Hæmotoxylon*, Gr., αἱμα (*haima*), blood, and ξυλον (*xulon*), wood. Reddish-yellow crystals forming the colouring principle of the *Hæmatoxylon campeachianum*, or Logwood.

HÆMODORA'CEÆ, Bot., Gr., αἱμα (*haima*), blood, and δωρον (*dōron*), a gift, from the rich red colour of the roots of certain species. A natural Order of Plants. It contains the *Red-root*, &c.

HAIRS, Bot., Sax., Þæꞃ. Hairs of plants are simple or glandular. The *simple* hairs consist of a single elongated cell, or of several cells placed end on. *Glandular* hairs are terminated with a cellular apparatus for the elaboration of secretions, such as the fragrant, volatile, oil of the Sweet-Briar, &c.

HALIN'EA, Min., Gr., ἁλινος (*halinos*), saline. The second Order of Minerals. It contains *Mellite, Fluor-Spar, Arragonite*, &c. &c.

HALIOTI'DES, Mal., Gr., ἁλιος (*halios*), of the sea, and ους (*ous*), ear. A group of magnificently coloured univalve Shells (*Haliotis*), so called from their shape.

HAL'ITUS, Phys., Lat., *halitus*, vapour. The pulmonary and cutaneous exhalation is so called, more particularly the former.

HALLUCINA'TION, Phys., Lat., *allucinari*, to be mistaken or deceived. Impressions generated in the brain (by a morbid condition of that organ) without any corresponding reality, or without any impression having been made on the senses.

HA'LO, Ast., Gr., ἁλως (*halōs*), a circular area. A circle surrounding the Sun and Moon, arising from the refraction of light.

HALOG'ENOUS, Chem., Gr., ἁλς (*hals*), salt, and γενναω (*gennaō*), I form. Substances producing salts by combination with metals.

HAL'OID, Chem., Gr., ἁλς (*hals*), salt. A term applied to a class of chemical compounds formed of two bi-elementary compounds, one or both of which are analogous to common salt.

HAL'OTECHNY, Chem., Gr., ἁλς (*hals*), a salt, and τεχνη (*techne*), art. The art of preparing salts.

HALTE'RES, Ent., Lat., *halter*—Gr., ἁλλομαι (*hallomai*), to jump—a balance-pole. A name used to designate two small bodies found beneath the alulæ of dipterous Insects, and which, in fact, are essential to their equilibrium in flight; for, if they be cut, flight is impossible. Probably rudiments of the second pair of wings.

HAMAMELA'CEÆ, Bot., Gr., ἁμα (*hama*), the same, and Μηλις (*Melis*), the Apple-tree. A natural Order of Plants, so called from the genus *Hamamelis*, thus named by Linnæus because it blossoms with the Apple.

HAR'MONY, Anat., Gr., αρω (*arō*), I adjust. A mode of articulation between bones, forming an immovable joint, which look as though they had simply been nicely adjusted and pressed together.

HARMOPH'ANOUS, Min., Gr., ἁρμος (*harmos*), joint, and φαινομαι (*phainomai*), to appear. A term applied by

Haüy to those crystals in which the joints or lines of junction are visible.

HARP'Y, Orn., Gr., ʽΑρπυια (*Harpuia*), from ἁρπω (*harpō*), I seize. A genus of rapacious birds was formed by Cuvier from this most powerful of all Eagles, and named *Harpya.* There is a fine specimen of this very rare animal in the cabinet of the author; some of the talons measure three inches in length, and are proportionally stout.

HAS'TATE, Bot., Lat., *hasta*, a halberd. Halbert-shaped—a term applied to leaves.

HAUS'TELLATE, Ent., Lat., *haustellum*, a sucker. A term applied to any insect that lives by suction.

HEC'TOGRAMME, Chem., Gr., ἑκτον (*hekton*)—a contraction of ἑκατον—a hundred, and γραμμα (*gramma*), a gramme. One hundred grammes—about 1884 grains, or 3 ounces, 1 drachm, 44 grains, Troy weight.

HEC'TOLITRE, Chem., Gr., ἑκτον (*hekton*), hundred, and λιτρα (*litra*), a litre, or pints, 26, 42. See *Litre.*

HELI'ACAL, Ast., Gr., ʽΗλιος (*Helios*), the Sun. A term applied to a Star when it rises or sets with the Sun; also when it first emerges from the rays of the Sun after a conjunction, and when it approaches so near the Sun as to be partly hidden by its rays.

HELIOCEN'TRIC, Ast., Gr., ʽΗλιος (*Helios*), the Sun, and κεντρον (*kentron*), centre. The position of a planet seen from the centre of the Sun.

HE'LIOID, Geom., Gr., ἑλιξ (*helix*), spiral. A parabolic, spiral curve.

HE'LIOSCOPE, Ast., Gr., ʽΗλιος (*Helios*), the Sun, and σκοπεω (*skopeō*), I view. An optical instrument, or telescope, for viewing the Sun.

HE'LIOSTAT, Ast., Gr., ʽΗλιος (*Helios*), the Sun, and στατος (*statos*)—from ἱσταμαι (*histamai*), to stop—a state of rest. An instrument used to observe the Stars, and to keep or fix them, as it were, in the instrument, so that the motion of the Star does not interrupt its observation.

HE'LIX, Anat., Gr., ειλειν, ειλειν (*eilein*), to surround. The external rim or edge of the pavilion of the ear.

HELMINTHOL'OGY, Nat. Hist., Gr., ἑλμις (*helmis*), a worm, and λογος (*logos*), a treatise. That branch of Zoology which treats of Worms.

HEMACH'RYMA, Zool., αἱμα (*haima*), blood, and κρυμος (*krumos*), cold. Cold blooded Animals in general.

HEMEROBI'DÆ, Ent., Gr., ἡμερα (*hemera*), a day, and βιος (*bios*), life. A Family of (*Planipennata* of Latreille) neuropterous Insects, short-lived, and furnished with large and finely reticulated wings. The odour of some species is abominable. Their larvæ, however, are highly useful, as they live on Aphides, which they literally kill by suction, and then clothe themselves with the skin.

HEM'ICARP, Bot., Gr., ἡμισυς (*hemisus*), half, and καρπος (*karpos*), fruit. The separated carpel of a cremocarp.

HEMIG'AMOUS, Bot., Gr., ἡμισυς (*hemisus*), half, and γαμος (*gamos*), nuptials. A term applied to Grasses when, of two florets in the same spikelet, one is neither staminate nor pistillate, and the other one is either.

HEMIP'TERA, Ent., Gr., ἡμισυς (*hemisus*), half, and πτερον (*pteron*), wing. The seventh Order of Insects, so called because they have only half-elytra—that is, no elytra of any sort, strictly speaking, but the anterior part of the wing is crustaceous, the posterior membranous. The common Squash-bug and the Camel-insect (*Reduvius*) are good examples.

HEM'ISPHERE, Geom., Gr., ἡμισυς (*hemisus*), half, and σφαιρα (*sphaira*), sphere. The half of a sphere, or globe.

HEPAT'IC, Anat., Gr., ἡπαρ (*hepar*), the liver. Relating to the liver. A term applied to its ducts, veins, arteries, &c.

HEPAT'ICÆ, Bot., Lat., *Hepatica*—from the Gr., ἡπαρ (*hepar*), liver—a name given to a small plant by the ancients, from its supposed action on the liver. A natural Order of Plants, composed of Moss-like genera. The ***Liverwort*** is an example.

HEP'TAGON, Geom., Gr., ἑπτα (*hepta*), seven, and γωνια (*gōnia*), angle. A figure with seven angles.

HEPTAGYN'IA, Bot., Gr., see *Heptagynous*. The seventh Order of Plants in the Linnæan system.

HEPTAGYNOUS, Bot., Gr., ἑπτα (*hepta*), seven, and γυνη (*gune*), female. Flowers with seven styles.

HEPTAN'DRIA, Bot., Gr., ἑπτα (*hepta*), seven, and ανδρος (*andros*), male. The seventh Class of the Linnæan system of Plants, so called because the flowers have seven stamens.

HEPTAN'DROUS, Bot., see *Heptandria.* Having seven stamens.

HERBA'RIUM, Bot., Lat., *herba*, grass, &c. A collection of dried Plants.

HERBS, Bot., Lat., *herba*, grass, &c. Plants, of which the stem, unlike that of shrubs and trees, does not become woody, but dies down to the ground, after flowering.

HERBIV'OROUS, Zool., Lat., *herba*, grass, and *voro*, I eat. Animals that live on herbs.

HERMET'ICALLY, Nat. Ph., Ἑρμης (*Hermes*), the Egyptian, or Hermes Trismegistus. The Hermetic Philosophy refers to the search for the philosopher's stone and the transmutation of metals; and, as the science was a sealed one for all but the initiated or adepts, the term has been made to signify any vessel or tube that is completely closed with its own substance.

HERPETOL'OGY, Zool., Gr., ἑρπητος (*herpetos*), reptile, and λογος (*logos*), a treatise. That branch of Zoology which treats of Reptiles.

HESPERID'EUM, Bot., Gr., Ἑσπερος (*Hesperos*), Hesperus, the grandfather of the Hesperides, possessors of the fabulous garden of golden fruit, probably Orange and Lemon trees. A many-celled, few-seeded, indehiscent fruit, the cells containing a mass of pulp in which the seeds are embedded. The Orange is a good example.

HETEROCLIT'ICAL, Mal., Gr., ἑτερως (*heterōs*), different, and κλινω (*klinō*), turned. Shells in which the spire is reversed, or turned the contrary way.

HETEROG'AMOUS, Bot., Gr., ἑτερος (*heteros*), different, and γαμος (*gamos*), nuptials. A peculiarity in the *heads* of some of the Compositæ, as in the Sunflower, where the *disk* flowers are perfect, and those of the *ray* are either pistillate only, or destitute of both stamens and pistils.

HETEROM'EROUS, Ent., Gr., ἑτερος (*heteros*), different, and μερις (*meris*), part. Applied to the second general section of coleopterous Insects, so called because the number of joints in the tarsi differ, being five in the first four, and four in the last two.

HETEROP'TEROUS, Ent., Gr., ἑτερος (*heteros*), different, and πτερον (*pteron*), wing. A term applied to the first of the two sections into which the hemipterous Insects are divided; so called because the wings are but slightly inclined, or horizontal. See *Homopterous.*

HETEROP'ODA, Mal., Gr., ἑτερος (*heteros*), different, and πους (*pous*), foot. The fifth Order of the Mollusca, so called because the foot is different from that found in the species of other orders.

HETEROT'ROPOUS, Bot., see its synonyme, *Amphiotropous.*

HETEROCER'CAL, Geol., Gr., ἑτερος (*heteros*), different, and κερκος (*kerkos*), tail. A term applied by Agassiz to a division of fossil Fishes, in which, as in the recent Shark, the superior lobe of the caudal fin is longer than the inferior, (or *vice versa,*) and in the superior of which the caudal vertebræ are continued.

HEX'AGON, Geom., Gr., ἑξ (*hex*), six, and γωνια (*gōnia*), angle. A geometrical figure with six angles.

HEXAG'ONAL, Geom., see *Hexagon.* Relating to a hexagon. In Mineralogy, the sixth form or system of crystallization ; it includes the hexagonal prism and rhombohedron.

HEXAGYN'IA, Bot., Gr., ἑξ (*hex*), six, and γυνη (*gune*), female. The sixth Order of the Linnæan system, embracing all flowers of the first thirteen Classes that have six styles.

HEXAG'YNOUS, Bot., see *Hexagynia.* Flowers with six pistils.

HEXAHE'DRON, Geom., Gr., ἑξ (*hex*), six, and ἑδρα (*hedra*), seat or base. A geometrical solid—a cube, which has six equal faces.

HEXAM'EROUS, Bot., Gr., ἑξ (*hex*), six, and μερις (*meris*) a portion. A term expressive of the number of parts in a whorl, which, of course, here is six—*dimerous* when two, &c.

Wilbert

HEXAN'DRIA, Bot., Gr., ἑξ (*hex*), six, and αιδρος (*andros*), male. The sixth Class of the Linnæan system, so called because the flowers have six stamens.

HEXAN'DROUS, Bot., see *Hexandria*. Flowers with six stamens.

HIA'TUS, Anat., Mal., Lat., *hiasco*, I yawn. In Anatomy, a slit or aperture. In Malacology, the opening between the shells of a bivalve which do not touch when closed.

HI'LUM, Bot., Lat., *hilum*, a coloured mark in a seed. The scar left in a Seed by the rupture of the funiculus.

HIPPOCASTANA'CEÆ, Bot., Gr., Ἱππος (*Hippos*), Horse, and Καστανα (*Kastana*), Chestnut. A natural Order of Plants. Ornamental Trees or Shrubs, with showy flowers. The *Horse-Chestnut* and *Buckeye* are examples.

HIPPU'RIC, Chem., Gr., Ἱππος (*Hippos*), a Horse. An acid, so called because obtained from the renal secretion of the Horse.

HIRSU'TE, Anat., Bot., Mal., Lat., *hirsutus*, completely covered with stiff hairs—applied both to animal and vegetable bodies.

HIS'PID, Mal., Bot., Lat., *hispidare*, to be covered with spines. Covered with rigid hairs or bristles.

HISTOL'OGY, Anat., Gr., ἱστος (*histos*), a web, the organism, and λογος (*logos*), a treatise. General Anatomy.

HOLE'TRA, Ent., Gr., ὁλος (*holos*), all, the whole, ελυτρον (*elutron*), sheath. The third Family of tracheal Arachnids, so called because the trunk and abdomen are undivided, or are enclosed in one sheath. The *Harvest-man* (Spider) of the children is one of them.

HOLOM'ETER, Geom., Gr., ὁλος (*holos*), all, and μετρεω (*metreō*), I measure. An instrument for ascertaining all sorts of measurements.

HOLOTHU'RIA, Rad., Gr., ὁλοθυριον (*holothurion*), from ὁλος (*holos*), all, and θυρα (*thura*), door or gate. A Family of radiated Animals, synonymous with the Echinodermata, which has the Holothurians for its type; so called because their elongated body is open at both ends, and has numerous small lateral apertures through which tentacula are protruded.

HOMIOM'ERAL, Nat. Hist., Gr., ὁμοιος (*homoios*), similar, and μερος (*meros*), part. A term applied to two substances of which all the parts are exactly alike.

HOMOCER'CAL, Geol., Gr., ὁμος (*homos*), similar, and κερκος (*kerkos*), tail. A term applied by Agassiz to all Fishes, fossil and living, in which the caudal fin is either single or equally divided, and the caudal vertebræ are not continued into the lobes.

HOMOG'AMOUS, Bot., Gr., ὁμος (*homos*), similar, and γαμος (*gamos*), nuptials. A term applied to certain flowers of the Compositæ, where, as in Eupatorium, all the flowers are similar and perfect.

HOMOGE'NEA, Rad., Gr., ὁμος (*homos*), similar, and γενος (*genos*), nature. The second Order of the Infusoria, or infusory Animalcula; so called because these minute beings present neither viscera nor other organs, very often not even the appearance of a mouth.

HOMOIO'SIS, Phys., Gr., ὁμος (*homos*), like. Assimilation—the proper elaboration of the chyle.

HOMOL'OGOUS, Geom., Gr., ὁμοιος (*homoios*), similar, and λογος (*logos*), ratio. Having the same ratio, or proportion. Applied to those sides of similar figures which are opposite to equal and corresponding angles, and are otherwise proportional to each other.

HOMOM'ALLOUS, Bot., Gr., ὁμος (*homos*), alike, and μαλλος (*mallos*), hairs. Spikes in which all the flowers incline to one and the same side.

HOMOP'TEROUS, Ent., ὁμος (*homos*), similar, and πτερον (*pteron*), wing. Insects which form the second section of the Hemiptera; so called because the elytra and wings are similar, and almost always tectiform.

HORIZON'TAL, Geom., see *Horizon*. Relating to, or parallel with the Horizon.

HORI'ZON, Ast., Gr., ὁριζω (*horizō*), to limit, terminate. A great circle dividing the sphere into two equal parts.

HORN'BLENDE, Min., see *Amphibolite*. A mineral of a dark green or black colour abounding in oxide of iron.

HU'MERUS, Anat., Lat., *humerus*—from the Gr., ωμος (*ōmos*), shoulder. The bone of the arm. That bone of the superior extremity which extends from the scapula to the ulna.

HU'MOURS, Anat., Gr., χυμος (*chumos*), juice. The fluids of the body, whether blood, chyle, lymph, &c.

HU'MUS, Chem., Lat., *humus*, soil. A brownish, pulverulent substance formed by the action of air upon solid animal and vegetable matter.

HY'ALINE, Min., Gr., ὑαλος (*hualos*), glass. Transparent, resembling glass.

HYALIN'EA, Min., Gr., ὑαλινος (*hualinos*), vitreous. The sixth Order of the Halinea. It contains *Epidote*, *Andalusite*, *Tourmaline*, *Beryl*, &c.

HY'ALOID, Anat., Gr., ὑαλος (*hualos*), glass, and ειδος (*eidos*), form. A membranous capsule which envelopes the vitreous lens—a canal also in the same capsule.

HIBERNAC'ULUM, Bot., Lat., a tent for the winter. A word correctly used by Linnæus for a leaf-bud, and derived from the *Hibernacula*, or winter quarters of the Roman soldiers.

HY'BRID, Zool., Bot., Gr. ὑβρις (*hubris*), an insult. The progeny of different species—the Mule, for instance—as if such beings were an insult to Nature.

HYDRA'CIDS, or Hydrogen acids, Chem., from *Hydrogen* and *acid*. Acids containing hydrogen as an essential element, such as the hydrochloric, hydriodic, &c.

HY'DRATES, Chem., Gr., ὑδωρ (*hudōr*), water, and *ate*, termination indicating a salt. Combinations of water with oxides, or compounds containing water as a proximate element.

HYDRAUL'ICS, Nat. Ph., Gr. ὑδωρ (*hudor*), water, and αυλος (*aulos*), a flute. That science which treats of the motion of fluids; so called because, in fact, hydraulics among the ancients signified nothing more than a science which taught them to force water through tubes—flutes—so as to produce musical sounds, thus forming a sort of organ in which water supplied the place of air.

HYDRIOD'IC, Chem., from *Hydrogen* and *Iodine*, q. v. An acid, so called, obtained from the decomposition of iodide of phosphorus and water.

HYDROBRO'MIC, Chem., from *Hydrogen* and *Bromine*, q. v. An acid obtained by the mutual decomposition of bromide of phosphorus and water.

HYDROCAR'BURETS, Chem., from *Hydrogen* and *Carbon*, q. v. Compounds of hydrogen and carbon.

HYDROCHARIDA'CEÆ, Bot., ὑδωρ (*hudōr*), water, and χαρις (*charis*), ornament. A natural Order of Plants, consisting of a few aquatic plants of no great beauty, although thus called the ornament of the waters—the *Valisneria*, for instance.

HYDROCORI'SÆ, Ent., Gr., ὑδωρ (*hudōr*), water, and κορις (*koris*), a bug. The second Family of hemipterous Insects, so called because they are aquatic. The *Nepæ* or aquatic Scorpions belong to it.

HYDROCYAN'IC, Chem., Gr., ὑδορ (*hudōr*), water, and κυανος (*kuanos*), blue. A most deadly poison, first discovered in Prussian blue, whence its common name of Prussic acid. It is colourless, and has a strong odour of bitter almonds.

HYDRODYNAM'ICS, Nat. Ph., Gr., ὑδωρ (*hudōr*), water, and δυναμις (*dunamis*), power. A science which applies the laws of Dynamics to the conditions of rest or motion in non-elastic fluids. It consists of Hydraulics and Hydrostatics.

HYDROFLUOR'IC, Chem., Gr., ὑδωρ (*hudōr*), water, and fluor-spar, so called, from Lat., *fluor*, a flow. A highly volatile Acid obtained by distilling fluor-spar with sulphuric acid. It acts with great power on glass.

HY'DROGEN, Chem., Gr., ὑδωρ (*hudōr*), water, and γενναω (*gennaō*), I beget—that is, a generator of water. A simple substance, also called inflammable air.

HYDROG'URETS, or **HY'DURETS**, Chem., see *Hydrogen*. Compounds of hydrogen with metals, &c.

HYDROLEA'CEÆ, Bot., Gr., ὑδωρ (*hudōr*), water, whence the genus Hydrolea. A natural Order of Plants.

HYDROM'ETER, Chem., Gr., ὑδωρ (*hudōr*), water, and μετρον (*metron*), measure. An instrument for measuring the relative density or specific gravity of liquids.

HYDROPH'ANOUS, Min., Gr., ὑδωρ (*hudōr*), water, and φαινω (*phainō*), I glisten or shine. Applied to certain stones which become translucent when placed in water.

HYDROPHI'DES, Herp., Gr., ὑδωρ (*hudor*), water, and οφις (*ophis*), serpent. Water-serpents, marked by a compressed or laterally flattened tail, for the purpose of swimming.

HY'DROPHYTES, Bot., Gr., ὑδωρ (*hudor*), water, and φυτον (*phuton*), plant. Water-plants, a term usually restricted to fresh-water Algæ.

HYDROPHYLLA'CEÆ, Bot., Gr., ὑδωρ (*hudōr*), water, and φυλλον (*phullon*), leaf. A natural Order of Plants.

HYDROSTAT'ICA, Rad., Gr., ὑδωρ (*hudōr*), water, and σταω (*staō*), I stand. The second Order of the third Class of radiated Animals, so called because the species which compose it are furnished with one or more bladders filled with air, by which they sustain themselves in water.

HYDROSTAT'ICS, Nat. Ph., Gr., ὑδωρ (*hudōr*), water, and σταω (*staō*), I stand. That branch of Hydrodynamics which treats of the equilibrium and pressure of liquids.

HYGIE'NE, Gr., ὑγιεινη (*hugieine*), healthy, whence Ὑγιεια (*Hugieia*), the Goddess of Health. That science which investigates the causes of disease, in order to arrive at the means of preventing it, and which reveals the proper mode of securing the full development of all the organs of the body.

HYGROM'ETER, Nat. Ph., Gr., ὑγρος (*hugros*), humid, and μετρον (*metron*), measure. An instrument used to determine the relative degree of moisture in the atmosphere.

HYGROMET'RIC, see *Hygrometer.* Relating to the moisture of the air.

HYLÆOSAU'RUS, Herp., Gr., ὑλη (*hule*), a wood, and σαυρος (*sauros*), a lizard. A name given by Mantell to a gigantic (extinct) genus of saurian Reptiles, the fossil remains of which were found in the Wealden strata of Sussex.

HYLOT'OMOUS, Ent., Gr., ὑλοτομος (*hulotomos*), a woodcutter. A term applied to Insects that penetrate wood, particularly to a group of Hymenoptera armed with a serrated ovipositor.

HYMENOP'TERA, Ent., Gr., ὑμην (*humen*), membrane, and πτερον (*pteron*), a wing. The ninth Order of Insects, so called because their wings are membranous. The *Bee*, *Wasp*, &c., are examples.

HYOI'DES, Anat., Gr., ὑοειδες (*huoeides*), from υ (*upsilon*), and ειδος (*eidos*), form—that is, upsilon or U-shaped. A small bone found at the root of the tongue, formed somewhat like our letter U.

HY'PER, Chem., Gr., ὑπερ (*huper*), over, or more. A prefix to acid compounds, implying a greater proportion of oxygen than is found in the one to which it is attached. Thus hyperchloric acid contains more oxygen than chloric acid.

HYPER'BOLA, Geom., Gr., ὑπερ (*huper*), beyond, and βαλλω (*ballō*), to throw. A section of a cone made by a plane, so that the axis of the section inclines to the opposite leg of the cone.

HYPERICA'CEÆ, Bot., Gr., Ὑπερικον (*Huperikon*), St. John's wort. A natural Order of Plants.

HY'PERSTHENE, Min., Gr., ὑπερ (*huper*), above, and στενος (*stenos*), narrow. Labrador hornblende, occurring in mass and crytals; ferro-silicate of magnesia.

HYPNOL'OGY, Hyg., Gr., ὑπνος (*hupnos*), sleep, and λογος (*logos*), a treatise. That part of Hygiene which relates to sleep.

HY'PO, Chem., Gr., ὑπο (*hupo*), under or less. A prefix to acid compounds, implying a less amount of oxygen than the compound to which it is attached. Thus hyposulphurous acid contains less oxygen than sulphurous acid.

HYPOCHON'DRIUM, Anat., Gr., ὑπο (*hupo*), under, and χονδρος (*chondros*), cartilage. The superior and lateral parts of the abdomen; so called because it is bounded by the cartilages of the false ribs.

HYPOGAS'TRIC, Anat., Gr., ὑπο (*hupo*), under, and γαστηρ (*gaster*), the abdomen. Relating to the Hypogastrium.

HYPOGAS'TRIUM, Anat., see *Hypogastric.* That part of the abdomen which is about two inches below the umbilicus.

HYP'OGENE, Geol., Gr., ὑπο (*hupo*), under, and γινομαι (*ginomai*), to be born. A term proposed by Lyell as indicative of the theory that granite, gneiss, and the other crystalline formations are, as he expresses it, *nether-formed*, or are rocks which have not assumed their present form and structure at the surface.

HYPOGLOS'SAL, Anat., Gr., ὑπο (*hupo*), under, and γλωσσα (*glōssa*), the tongue. Applied to parts under the tongue, as the *hopoglossal nerve*, &c.

HYPOG'YNOUS, Bot., Gr., ὑπο (*hupo*), beneath, and γυνη (*gune*), female. A term expressing the relative situation of the corolla, stamens, &c., of Plants to the ovary, which is beneath them.

HYPOTH'ENUSE, Geom., Gr., ὑποτεινȣσα (*hupoteinousa*), the hypothenuse. The line that subtends the right angle of a right-angled triangle.

HYPOTH'ESIS, Gr., ὑποτιθημι (*hupotithemi*), to suppose. A supposition from which consequences may be drawn—a system founded on a principle not proved.

HYSTERAN'THOUS, Bot., Gr., ὑστερον (*husteron*), after, and ανθος (*anthos*), flower. Applied to Plants of which the leaves make their appearance after the flowers, as in the Almond.

ICE'BERG, Geol., Ger., *eis*, ice, and *berg*, mountain. Floating mountains of ice so called, often of enormous size, capable of transporting from fifty to one hundred thousand tons of rock, and thus of producing important changes on the surface of the Earth.

ICHNEU'MONS, Ent., Gr ιχνευμων (*ichneumōn*), originally applied to a small quadruped (Herpestes), now restricted, to avoid confusion, to a Family of pupivorous Hymenoptera. The Ichneumons bear some general resemblance to the Wasp, but may be readily distinguished on close examination. They deposit their eggs in the larvæ, &c., of living Insects, where they pass into the chrysalis state.

ICOSÆ'DRON, Geom., Gr., εικοσι (*eikosi*), twenty, and ἑδρα (*hedra*), base or face. A solid with twenty equilateral triangular faces.

ICOSAN'DRIA, Bot., Gr., εικοσι (*eikosi*), twenty, and ανηρ (*aner*), male. The twelfth Class of Plants, according to the Linnæan system, so called, because the flowers have from twelve to twenty stamens.

ICTHYOL'OGY, Zool., Gr., ιχθυς (*ichthus*), fish, and λογος (*logos*), a treatise. That branch of Zoology which treats of Fishes.

ICTHYOSAU'RUS, Zool., Gr., ιχθυς (*ichthus*), fish, and σαυρος (*sauros*), lizard. A genus of extinct Animals found in the lias that combined the characters of a saurian and fish.

IDE'A, Phys., Gr., ειδω (*eidō*), to see. A mental image, the result of an impression made upon the senses, and appreciated by the brain.

IDIOSYN'CRASY, Hyg., Gr., ιδιος (*idios*), peculiar, and κρασις (*krasis*), temperament, or constitution. An organic peculiarity which causes one person to be seriously affected by an agent which makes no impression on another.

IGUAN'IDÆ, Herp., Sp., *Iguana*, a well known Lizard of S. America. A Family of Lizards, so called from the Iguana.

IGUAN'ODON, Herp., *Iguana*, q. v., and Gr., οδους (*odous*), tooth. A fossil genus of gigantic Lizards, which resembled the Iguana in their teeth, whence the name. By comparing the bones of the living species of Iguana with those of the Iguanodon, the length of the latter must have been *seventy feet*, and the circumference of the body over fourteen!

IL'IUM, Anat., Gr., εἱλειν (*heilein*), to twist. The longest portion of the small Intestine, commencing at the end of the jejunum, and terminating at the colon. It receives its name from its windings. The same name is applied to the superior of the three bones forming the hip or the Innominatum.

ILLECEBRA'CEÆ, Bot., Lat., *Illecebra*, Purslain. A natural Order of Plants.

IMA'GO, Ent., Lat., *imago*, the image, or portrait. The perfect Insect after its metamorphosis, so called, because it is then the exact image of its parent.

IM'BRICATED, Bot., Lat., *imbricatus*, lapping, like concave tiles on a roof, in regular order, as the scales on the cup of the Acorn.

IMMER'SION, Ast., Opt., Lat., *immergere*, to immerse. The beginning of an eclipse—the disappearance of a planet in the Sun's beams. In Optics, the point of a transparent medium in which the incidental ray enters the medium.

IM'PACT, Nat. Ph., Lat., *impactus*, struck. The *collision* of two balls is the impact.

IMPEN'NATE, Orn., *im*, priv., and Lat., *penna*, a wing. Wingless, a term very improperly applied to Penguins, &c., because they have wings, although greatly reduced.

INANI'TION, Hyg., &c., Lat., *inanire*, to empty. Exhaustion from want of food.

INCESSO'RES, Orn., Lat., *insidere*, to sit. A term which has been improperly applied to an Order of Birds, because that Order does not include many *perchers*.

IN'CIDENCE, Opt., Lat., *incidere*, to fall upon. The point of a medium which receives an incidental ray of light.

INCIDEN'TAL, Opt., Lat., *incidere*, to fall upon. A term applied to those rays of light that fall upon a medium whether it be transparent or opaque.

INCINERA'TION, Chem., Lat., *incinerare*, to reduce to ashes by fire. The combustion of organic matter for any purpose whatever.

INCI'SED, Bot., Lat., *in*, into, and *cædere*, to cut. Applied to Leaves of which the margin is deeply and irregularly cut, as if with a knife.

INCI'SOR, Anat., Lat., *in*, and *cædere*, to cut. The front or incisor Teeth are so called, from their shape and function, being made to cut. They are as often called *incisive*.

INCLU'SA, Mal., Lat., *includo*, I inclose. A group of testaceous Mollusca; so called because they are completely enveloped by the mantle, which leaves only a small aperture for the foot, and is prolonged into two tubes beyond the shell.

INCUM'BENT, Bot., Lat., *incumbere*, to lean on. A term applied to the position of the Cotyledons with respect to the radicle—they are incumbent when the radicle rests on the back of one of them.

IN'CUS, Anat., Lat., *in*, under, and *cudere*, to hammer. An anvil. The second of the four small Bones found in the tympanum of the ear.

INDEHIS'CENT, Bot., Lat., *in*, without, and *deshiscere*, to split, or yawn. Applied to mature Fruits which remain closed, as in the Acorn, and to distinguish them from those which split to permit the seeds to escape. See *Dehiscent*.

INDIG'ENOUS, Bot., &c., Lat., *inde*, here, or there, and *genitus*, born. Whatever is originally native of this or that country, is indigenous to it.

INDUMEN'TUM, Orn., Lat., *induo*, I put on. The plumage or clothing of Birds.

INDU'SIAL, Geol., Lat., *indusia*, a tunic. A remarkable form of fresh-water Limestone; so called from the enormous quantities of the indusiæ or cases of the larvæ of Phryganea which it contains.

INDU'SIUM, Bot., Lat., *indusium*, a shirt. A scale which sometimes envelopes the *thecæ* of the Ferns.

INER'TIA, Nat. Ph., Lat., *iners*, powerless, a term expressive of one of the properties of matter—that is, passiveness, requiring the operation of some extrinsic cause to put it in motion if at rest, or to render it stationary if in motion.

IN'FANCY, Phys., Lat., *in*, not, and *fans* (from φαω), speaking. The period of human life included between birth and the seventh year.

INFLORES'CENCE, Bot., Lat., *inflorescere*, to flower, or flourish. A term expressive of the arrangement of flowers on the stem or branch of the Plant.

INFRABRANCHIA'TA, Mal., Lat., *infra*, beneath, and *branchiæ*, gills. The third Order of the bare-gilled Gasteropoda; so called because their branchiæ are beneath the mantle.

INFUNDIB'ULUM, Anat., Lat., *infundibulum*, a funnel. A term applied to various parts of the body, Brain, Cochlea of the ear, &c. Hence *Infundibuliform*, funnel-shaped.

INFUSO'RIA, Zool., Lat., *infusus*, an infusion. Animalcula, called Infusory because they are often obtained from infusions of plants in water. They form the fifth and last Class of the Radiata and of the Animal Kingdom.

INGES'TA, Phys., Lat., *in*, into, and *gerere*, to carry. Food taken into the stomach.

INGLU'VIES, Orn., Lat., *ingluvies*, crop. The first stomach or craw of Birds.

INNERVA'TION, Phys., Lat., *in*, in, and *nervus*, a nerve. The effect of the nervous fluid—nervous action

INNOMINA'TUM, Anat., Lat., *in*, priv., or without, and *nomen*, a name. Nameless. Applied to the hip, *Os*, *innominatum*, &c.

INORGAN'IC, Nat. Hist., Lat., *in*, without, and *organum* (Gr., εργον, work), an organ, or instrument. The second great Class of bodies; so called because they are totally destitute of organs. All mineral bodies, for instance, are inorganic.

INOSCULA'TION, Anat., see *Anastomosis*, a better word.

INSALIVA'TION, Phys., Lat., *in*, in, and *saliva*, saliva. The act of mingling the saliva with the food in the mouth.

IN'SECTS, Zool., Lat., *inseco*, I cut, or divide. These animals are so called because there is a deep incision between their thorax and abdomen. The Insecta constitute the third Class of the Articulata.

INSECTIV'ORA, Mam., Lat., *Insectum*, an Insect, and *vorare*, to devour. The second Family of the third Order of Mammalia ; so called because their principal food consists of insects. It includes the *Hedgehog*, *Shrew*, *Mole*, and weaker Carnaria.

INSECTIV'OROUS, Nat. Hist., see *Insectivora.* A term indicative of the regimen of the *Goat-suckers*, certain *Bats*, &c., which live on insects.

INSER'TION, Anat., Bot., Lat., *in*, into, and *serere*, to knit. A term in Anatomy usually restricted to the attachment of one extremity of a muscle or ligament to a bone ; in Botany, to the attachment of the floral organs.

IN'STINCT, Phys., Lat., *instingao*, I am forced to, from στιζω (*stizo*), to sting. That principle which, unlike reason, *compels* animals of the same species to act preciselv alike under all circumstances.

IN'TER, Anat., &c., Lat., *inter*, between. A word frequently used in Anatomy, &c., in conjunction with the names of organs to designate their position, as *inter-clavicular ligament*, *interosseous muscle*, &c.

INTERMAX'ILLARY, Zool., Lat., *inter*, between, and *maxilla*, the jaw-bone. A term chiefly restricted to two small bones which intervene between the two superior maxillaries of vertebrated animals, and which receive the superior incisor teeth. They form a distinguishing character between Man and the other animals of his class, although in the very young subject they exist even there, but never in the adult. In other Mammiferæ, even the most anthropomorphous, they are distinct bones at all periods of life.

INTERNO'DES, Bot., Lat., *inter*, between, and *nodus*, a knot. The space between the *nodes* (q. v.) of the stem of a tree, as, for example, between the joints (nodes) of the Bamboo, &c.

INTES'TINE, Anat., Gr., εντος (*entos*), within, and σταω (*staō*), to be placed. The alimentary canal of Animals—in Man, about thirty-eight feet in length.

INTRO'SE, Bot., Gr., εν (*en*), in, and τρεπω (*trepō*), to turn. Applied to Anthers when turned inward or to the pistil.

INVERTEBRA'TA, Zool., Lat., *in*, priv., and *vertebra*, a back bone. The Animals composing the second of the two great divisions in Zoology; so called because they are destitute of vertebræ, and consequently of a skeleton strictly so called. It is in many respects a convenient section, but liable to many objections, which are removed by the four great sections of Cuvier.

INVER'TEBRATED, Zool., Lat., *in*, without, and *vertebræ*, back bones. One of the two great divisions of the Animal Kingdom; so called because all the animals which compose it are destitute of vertebra.

IN'VOLUCEL, Bot., see *Involucre*, from which it only differs by being connected with the secondary umbels—a mere diminutive of the first.

IN'VOLUCRE, Bot., Lat., *involucrum*, an envelope. A term applied to a whorl of Leaves, or bracts, which frequently surround the base of the head and umbel of Plants, assuming a great variety in form. The white and corolla-looking part of the flower of the Dogwood is a good instance of an involucre.

IN'VOLUTE, Bot., Lat., *in*, and *volvere*, to turn inwards. Rolled inwards.

I'ODINE, Chem., Gr., ιωδης (*iōdes*), violet-coloured. A chemical Principle (discovered in 1811 by Courtois) in the shape of crystalline scales of a dark bluish tint and metallic lustre. When thrown on a heated body, it gives off a most beautiful violet-coloured vapour, whence its name. It is found in kelp, fuci, sponge, &c.

I'OLITE, Min., Gr., ιον (*ion*), violet. A Mineral (crystal) so called from its violet-blue colour.

IRIDA'CEÆ, Bot., Gr., Ιρις (*Iris*), Rainbow, &c., see *Iris*. A natural Order of Plants; so called from their many-coloured petals—ex., the Flags, &c.

IRID'IUM, Chem., Gr., Ιρις (*Iris*), the fabled messenger of the Gods—the Rainbow. A Metal so called from the variety of colours its preparations exhibit. It is always found in native platinum, is of a pale, brilliant, white colour, and has a specific gravity greater than that of platinum, being 21.18.

I'RIS, Anat., Gr., Ιρις (*Iris*), the fabulous messenger of Jupiter and Juno; so called from ειρω (*eirō*), to announce—the same in heathen mythology with the rainbow. A circular, muscular Membrane, with an opening in the centre called the pupil, which separates the anterior from the posterior chamber of the eye; it is of various colours in different persons, and hence the name.

IRRITABIL'ITY, Phys., Lat., *irritare*, to excite. A quality inherent in all living, organic bodies, which renders them susceptible of being acted on by certain stimuli.

ISCHIAT'IC, Anat., Gr., ισχιον (*iskion*), the haunch. This term is seldom used in modern times, the first letter being usually cut off, hence *Sciatic*, applied to parts connected with the hip.

ISOCHROMAT'IC, Opt., Gr., ισος (*isos*), equal, and χρωμα (*chrōma*), colour. Having the same colour. A term applied to the two curves or lines of decomposed light, produced by double refraction, which have the same colour.

ISOCH'RONOUS, Phys., &c., Gr., ισος (*isos*), equal, and χρονος (*chronos*), time. At the same instant. The systole and diastole of the heart and arteries are *nearly* isochronous.

ISOG'ONAL, Geom., Gr., ισος (*isos*), equal, and γωνια (*gōnia*), angle. With equal angles.

ISOM'ERIC, Chem., Gr. ισος (*isos*), equal, and μερος (*meros*), a portion. A word applied to bodies which, so far as their composition goes, are equal or alike, but which differ in qualities.

ISOM'ERISM, Chem., Gr., ισος (*isos*), equal, and μερος (*meros*), part. A term expressive of the relation of different bodies agreeing in composition, but varying in properties. Such bodies are said to be *isomeric*.

ISOMORPH'ISM, Chem., Gr., ισος (*isos*), equal, and μορφη (*morphe*), shape or form. The relation in form of different mineral bodies when crystallized. Such bodies are thence said to be *isomorphic*.

ISON'OMAL, Min., Gr., ισος (*isos*), equal, and νομος (*nomos*), law. Submitted to the same law. A term applied by Haüy to Crystals in which *all* the decretions are equal.

ISOPERIM'ETRAL, Geom., Gr., ισος (*isos*), equal, and περιμετρον (*perimetron*), contour. Applied to figures of which all the contours are equal.

ISOP'ODA, Crust., Gr., ισος (*isos*), even or equal, and πους (*pous*), foot. The fifth Order of the Crustacea. It consists of species that have no common names.

ISOS'CELES, Geom., Gr., ισος (*isos*), equal, σκελος (*skelos*), leg. A triangle with two equal sides.

IXO'DES, Ent., Gr., ιξωδης (*ixōdes*), tenacious, from ιξος (*ixos*), glue. A group of Insects so called, from the tenacity with which they cling to their prey. *Ticks.*

JASMINA'CEÆ, Bot., Pers., ياسم (*yāsim*), probably, from ياسه a Tartar word signifying a *royal mandate*, because *this* was compared to the fragrance of the Jessamine. A natural Order of Plants composed of a few Asiatic genera with fragrant flowers, like those of its type, the Jasminum.

JEJU'NUM, Anat., Lat., *jejunus*, empty. The second portion of the small Intestine, bounded by the duodenum superiorly and the ileum inferiorly. It is so called because it is usually found empty.

JUGLANDA'CEÆ, Bot., Lat., *Juglans*, the Walnut tree. A natural Order of Plants. It contains trees valuable for their timber and fruits. Such are the *Walnut*, *Butternut*, *Peccan*, &c.

JU'GULAR, Anat., Lat., *jugulum*, the throat. Relating to the throat.

JUNCA'CEÆ, Bot., Lat., *Juncus*, a Rush. A natural Order of Plants

KALEI'DOSCOPE, Opt., Gr., καλος (*kalos*), beautiful, ειδος (*eidos*), a form, and σκοπεω (*skopeō*), I observe. An instrument invented by Dr. Brewster, which, as its name implies, reveals beautiful forms, almost indefinite as to number.

KA'LOTYPE, Opt., Gr., καλος, beautiful, and τυπος (*tupos*), form or figure. A term applied to a prepared Paper for phytogenic purposes, so excessively sensible to the action of light that exposure to that of the Moon will produce impressions upon it.

KATH'ODE, Nat. Ph., Gr., κατα (*kata*), downwards, and ὁδος (*hodos*), the way. The point in an electrode, from which electricity passes off, or out.

KIL'OGRAMME, Chem., Gr., χιλιοι (*chilioi*), a thousand, and γραμμα (*gramma*), a gramme—2 pounds, 8 ounces, 1 drachm, and 24 grains, Troy.

KIL'OLITRE, Chem., Gr., χιλιοι (*chilioi*), a thousand, and λιτρα (*litra*), a litre, an ancient Measure for fluids, which held rather less than a quart. A thousand litres.

LABEL'LUM, Bot., Lat., *labellum*, a little lip. A term applied to one of the Petals (mis-named Nectary) of the orchidaceous Plants, because it always differs in shape from the others.

LA'BIAL, Anat., Lat., *labium*, lip. An adjective applied to various organs connected with the lip, such as the labial arteries, veins, glands, &c.

LABIA'TÆ, Bot., Lat., *labia*, lips. A natural Order of Plants, so called because the corolla of the flowers is bilabiate. It contains *Thyme*, *Sage*, *Lavender*, *Mint*, &c.

LA'BIATE, Bot., Lat., *labia*, a lip. A term expressing an irregularity in the form of the corolla and calyx of certain Flowers, occasioned by the unequal union of the sepals or petals which thus appear to form two lips.

LA'BIUM, Ent., Lat., *labium*, a lip. The labium, in Entomology, consists of the lower, or true lip only.

LAB'RADORITE, Min., from *Labrador*. Labrador spar. A beautiful opalescent Felspar found on the coast of Labrador, whence its name. It exhibits beautiful tints of blue, red, green, and yellow.

LABROI'DES, Icth., Lat., *labrum*, a lip. The fourteenth Family of acanthopterygious Fishes; so called because they are furnished with thick fleshy lips.

LA'BRUM, Ent., Lat., *labrum*, the lip or edge of an opening. In Entomology, the *upper* lip only.

LAB'YRINTH, Anat., Gr., λαβυρινθος (*laburinthos*), a place full of devious walks into or out of which it is difficult to pass. The name of the internal Ear, consisting of the *vestibule, cochlea, semi-circular canals*, and *meatus internus*.

LACERTIN'IDA, Herp., Lat., *Lacerta*, a Lizard. The second Family of the Saurians.

LAÇ'ERUM, Anat., Lat., *lacerare*, to tear. A term expressive of the appearance of several openings in Bones which look like slits, or as if torn, the *foramen lacerum* of the sphenoides for instance.

LACH'RYMAL, Anat., Lat., *lachryma*, a tear. A term applied to various parts connected with the lachrymal apparatus of the Eye, as the *lachrymal fossa, l. gland, l. caruncle*, &c.

LACIN'IATE, Bot., Lat., *lacinare*, to cut into slips. Cut into slender and irregular parts.

LAC'TEALS, Anat., Lat., *lac*, milk. A system of vessels which convey the chyle from the alimentary canal to the thoracic duct. They are so called because the chyle resembles milk.

LAC'TIC, Chem., Lat., *lac., milk;* whence the terms, *lactic acid*, or an acid proper to milk, *lactation, lactiferous vessels*, &c. &c.

LAC'TINE, Chem., Lat., *lac*, milk. Lactine or sugar of milk, is one of the most important constituents of milk. It can be made to crystallize (very slowly, however) in four-sided prisms by animal charcoal.

LACUS'TRINE, Geol., Lat., *lacus*, a lake. Applied by Geologists to certain fresh-water formations.

LACU'NA, Anat., Lat., *lacus*, a lake—a deep cavity Small cavities in the mucous tissues. See *Crypts*.

LÆMODIP'ODA, Crust., Gr., λαιμος (*laimos*), throat, and πους (*pous*), foot. The fourth Order of the Crustacea, so called because the two anterior feet form part of the head or throat. They are all marine Crustacea, and have no vulgar names.

LAMBDOI'DAL, Anat., Gr., from the Greek letter Λ, λαμβδα (*lambda*), L. One of the Sutures, so called from its shape.

LAM'ELLATE, Anat., Lat., *lamella*, a little plate. A diminutive of *lamina*. Applied to parts composed of thin layers, or lamellæ.

LAMEL'LICORNS, Ent., Lat., *lamella*, a little lamina, and *cornu*, horn. The sixth Family of coleopterous Insects, so called because their antennæ are terminated in a club composed of little scales, which are disposed like the leaves of a book. It includes a great many genera of Beetles, among others the *Goldsmith* of the children—a *Cetonia*.

LAMELLIROS'TRATÆ, Orn., Lat., *lamella*, a little plate or lamina. The fourth Family of the Palmipedes or web-footed Birds, so called because their bill is furnished with thin salient laminæ, forming a sort of strainer. It contains the *Ducks*, *Swans*, &c. The *Lamellirostres* of the French.

LAN'ATE, Bot., Gr., λανος (*lanos*), wool. Woolly. Applied to stems and leaves.

LAN'CEOLATE, Bot., Lat., *lanceola*, a little lance. Lance-shaped. Applied to leaves.

LANTA'NIUM, Chem., Gr., λανθανειν (*lanthanein*), to conceal. A metal discovered by Mosander in cerite, associated with and *concealed* by the oxide of Cerium.

LAR'VA, Ent., Lat., *larva*, literally, a phantom, something disguised, a mask. The first or caterpillar state of an Insect, which is disguised in the larva, as under a mask.

LAR'YNX, Anat., Gr., λαρυγξ (*larugx*), a whistle. A complicated organ (of the voice) composed of cartilages, vocal cords, ligaments, muscles, &c., through which air passes into the trachea and lungs. Birds have two, one for the transmission of air only, and very simple, the other, or inferior, more or less complicated for their notes. Hence *Laryngeal*, relating to the Larynx.

LA'TENT, Chem., &c., Lat., *latens*, hidden. A term applied to Caloric, &c.

LATIS'SIMUS, Anat., Lat., *latus*, broad, extended. This term (superlative) is applied to various Muscles, such as the *Latissimus dorsi*, &c.

LAT'ITUDE, Ast., Lat., *latitudo*, breadth. The distance of a heavenly body from the ecliptic, north or south, reckoned on a great circle towards the pole of the ecliptic.

LAURA'CEÆ, Bot., Lat., *Laurus*, the Laurel. A natural Order of Plants. It contains many valuable plants, such as the *Cinnamon* and *Camphor trees*. They are all aromatic.

LAXA'TOR, Anat., Lat., *laxare*, to relax or loosen. A term applied to various Muscles, antagonists of the *Tensors*, (which see,) the *Laxator tympani*, for instance.

LEAF, Bot., Sax., leaf. The digestive organ of a Plant.

LEAF'LET, Bot., see *Leaf*. The various, small, lateral leaves that collectively constitute a compound leaf, such as is presented by the *Locust*, *Sensitive Plant*, &c.

LEG'UME, Bot., Lat., *legumen*, any vegetable, such as Beans, Peas, &c., from *lego*, I gather. In Botany, this term is used to designate a peculiar sort of fructification, called a *Pod*.

LEGU'MIN, Bot., same etym., as *Legume*. A peculiar vegetable principle containing nitrogen, abounding in Peas, Beans, &c., which, so far as regards composition, according to Liebig, is identical with vegetable *casein*.

LEGU'MIN, Chem., Lat., *legumen*, a legume, or pod. A vegetable principle abounding in Peas and other leguminous seeds, analogous, in all respects, to animal albumen

LEGUMINO'SÆ, Bot., see *Legume*. A natural Order of Plants. It consists of Herbs, Shrubs, and Trees, the fruit of which is a legume. The common *Pea*, *Bean*, *Honey Locust*, &c., belong to this Order.

LEM'MA, Geom., Gr., λαμβανω (*lambanō*), I assume. A proposition laid down for the purpose of facilitating the demonstration of a theorem.

LEMNA'CEÆ, Bot., *Lemna*, Duckweed. A natural Order of Plants. It consists chiefly of *Lemna*, a well-known floating aquatic.

LE'MURS, Mam., Gr., *lemures*, spectres. A term formerly applied to several of the quadrumana, but now restricted to a few species of the genus Lemur. They are found *only* in the island of Madagascar and its vicinity, where they replace the Monkeys.

LENS, Opt., Anat., Lat., *lens*, the seed of the lentil, a legume. Glasses of optical instruments were named lenses from the resemblance in form of those first employed—double convex—to lentils. They are now made of various forms, and are of six different sorts. The lenses of the eye are three, *aqueous*, *crystalline*, and *vitreous*.

LEPIDOP'TERA, Ent., Gr., λεπις (*lepis*), a scale, and πτερον (*pteron*), wing. Scale-winged. The tenth Order of Insects. It includes the *Butterflies*, *Moths*, &c.; so called because the dust on their wings is actually composed of small scales.

LEU'CIN, Chem., Gr., λευκος (*leukos*), white. A white substance obtained from the muscular fibre by the action of dilute nitric acid.

LEU'CITE, Min., Gr., λευκος (*leukos*), white. A Mineral sometimes called Vesuvian Garnet, because it usually occurs in lava. It is a white crystal, in form somewhat resembling the garnet.

LEVA'TOR, Anat., Lat., *levare*, to lift. The Elevator. A term applied to numerous muscles, antagonists of the *Depressors*; such are the *Levator anguli oris*, *L. scapulæ*, &c.

LE'VER, Phys., &c., Lat., *levare*, to lift. Any inflexible bar moving on a fixed point, and used for moving bodies.

LI'BER, Bot., Lat., *liber*, (Gr., λεπος,) bark. The inner bark of a Plant, or that which is in contact with the wood.

LIBRA'TION, Ast., Lat., *librare*, to balance. A term applied to a certain irregularity in the motion of the Moon, in consequence of which she does not always present the same face to the Earth.

LICHE'NES, Bot., Gr., Λειχην (*Leichen*), Lichen. A Plant so called by the Greeks, from the spots on it which resemble sores. The *Iceland Moss* is a good instance of a true Lichen. A natural Order of Plants.

LICH'ENIN, Chem., see *Lichenes*. A peculiar amylaceous substance, combined with a bitter principle, found in the Lichens.

LIG'AMENT, Anat., Lat., *ligare*, to bind. A tie. Organs of the desmoid system which serve to bind the bones together and keep their articulating surfaces in contact. They are capsular, or funicular.

LIGHT, Opt., Sax., leoht. Minute particles of matter emanating from luminous bodies, according to Newton—an excessively subtle fluid diffused throughout space, according to Descartes.

LIG'NIN, Chem., Lat., *lignum*, wood. The tissue of Plants, whether cellular, vascular, or woody, the same in all plants, and consists of the same elements, as gum, sugar, and starch.

LIG'ULA, Ent., Lat., *ligula*, a spoon. A term applied by Latreille to a part of the *labium* or lower lip of Insects.

LIG'ULE, Bot., Lat., *ligula*, a little tongue. A narrow-pointed membranous appendage at the extremity of the petiole of the true Grasses.

LILIA'CEÆ, Bot., Lat., *Lilium* (Gr., λειρον), a Lily. A natural Order of Plants. It contains the *Lily*, *Tulip*, *Tuberose*, *Hyacinth*, *Onion*, &c.

LIM'BUS, Bot., Lat., *limbus*, an edge. Applied by Botanists to that part of a Petal which is above the unguis or claw—the broad, thin, coloured portion of the petal of the Rose is the limbus.

LIMNANTHA'CEÆ, Bot., Lat., *Limniades*. Lake-Nymphs. A genus of Plants so called. A natural Order of Plants.

LINA'CEÆ, Bot., Lat., Gr., λινον (*linon*), flax. A natural Order of Plants. The common Flax is a good example of the whole Order.

LINE, Geom., Anat., &c., Lat., *linea*, a line. In Geometry, a line signifies length without breadth. In Anatomy, it is applied variously, sometimes to a marked line extending along a bone, such as the *linea aspera* (rough line) of the femur; and then again to a tendinous cord, such as the *linea alba* of the abdomen. The *median* line is an imaginary one, supposed to divide the body or any organ into two equal parts.

LIQUA'TION, Chem., Lat., *liquatio*, melting. A term used in separating Metals by fusion.

LITH'IA, Chem., Gr., λιθινος (*lithinos*), stony. A rare alkaline oxide, so called from its having been first derived from an earthy Mineral.

LITH'IUM, Chem., Gr., λιθινος (*lithinos*), stony. A new Metal resembling Sodium, obtained by Davy from the voltaic decomposition of Lithia.

LITH'ODOMES, Mal., Gr., λιθος (*lithos*), stone, and δωμα (*dōma*), house, or δεμω (*demō*), I build. A term applied to various genera of Bivalves that penetrate into rocks, and excavate a cell there in which they reside.

LI'TRE, Chem., Gr., λιτρα (*litra*), an ancient Greek Measure. The French litre is rather less than a quart.

LIT'TORAL, Mal., Lat., *littus*, river shore. Of, or belonging to, the shore.

LIV'ER, Anat., Sax., lıꝼeꞃe. The largest gland in the body, the secreting organ of the bile.

LOBE, Anat., Bot., Gr., λοβος (*lobos*), the lug of the ear. By analogy, it is applied to partly separated portions of any organ, animal or vegetable.

LOBELIA'CEÆ, Bot., *Lobel*, a celebrated Naturalist. A Natural Order of Plants. All the plants of this order are narcotic and acrid poisons. The *Indian Tobacco* is one of them.

LOB'ULUS, Anat., see *Lobe*, of which it is a diminutive. A little Lobe.

LOCULICI'DAL, Bot., *loculus*, a little lodge, and *incidere*, to cut. A term applied to that sort of dehiscence which takes place in a compound ovary, each carpel opening directly into the back of the cells—a mode of dehiscence visible in the *Lilac*, &c.

LONGIPEN'NATÆ, Orn., Lat., *longus*, long, and *penna*, a feather. The second Family of the Palmipedes, or web-footed Birds; so called from their great length of wing. It includes the *Petrels*, *Albatross*, *Gulls*, *Terns*, &c. The *Longipennes* of the French naturalists.

LONGIROS'TRATÆ, Orn., Lat., *longus*, long, and *rostrum*, a bill or beak. The fourth Family of the Grallatoriæ or Waders. It contains the *Curlew*, *Snipes*, &c.

LON'GITUDE, Ast., Lat., *longitudo*, length. The distance of any celestial body from the first point of Aries reckoned eastward on the ecliptic.

LON'GUS, LONGIS'SIMUS, Anat., Lat., *longus*, long. These terms, long and longest, are applied to various muscles, such as the *Longus colli*, *Longissimus dorsi*, &c.

LONIÇ'ERÆ, Bot., *Lonicer*, a celebrated Naturalist. A tribe of the Caprifoliaceæ, characterized by tubular flowers and filiform style. The *Honeysuckles*.

LOPHOBRAN'CHII, Icth., Gr., λοφια (*lophia*), hairs, or a tuft of hair, and βραγχια (*bragchia*), gills. The fifth Order of malacopterygious Fishes; so called because their gills are in the form of tufts. It contains the *Hippocampus* or *Sea-Horse*, *Pegasus*, &c.

LOPHYROP'ODA, Crust., Gr., λοφος (*lophos*), a crest, and πους (*pous*), foot. A section of crustaceous Entomostraca, so called because their feet are tufted or fringed with hairs.

LORE, Orn., Lat., *lorum*, a rein, narrow strip of leather. Applied to a naked line on the head of Birds, extending from the eye to the bill.

LUCAN'IDÆ, Ent., Gr., Λυκος (*Lukos*), a Wolf. A group of coleopterous Insects—why so called, it is difficult to imagine, unless from their ability to pinch. The well-known Stag-Beetle is one of them.

LUCER'NAL, Opt., Lat., *lucerna* (Gr., λυχιος), a lamp, or lantern. A Microscope, so called because the object viewed by it is illuminated by a lamp instead of the Sun.

LUM'BAR, Anat., Lat., *lumbus*, the loin. This term is variously applied to arteries, veins, and nerves in the region of the Loins, and to the region itself.

LUNA'RE, Ant., Lat., *Luna*, the Moon. The *Os lunare* is the second bone of the first row of the Corpus; so called from its semi-lunar or crescent-like shape.

LU'NATE, Bot., Lat., *Luna*, the Moon. Crescent-shaped.

LUNGS, Anat., Sax., lunȝen, the lights. Cavernous organs by which most animals that breathe free air respire.

LU'NULATE, Bot., see *Lunate*, of which it is a diminutive.

LUTE, Chem., Lat., *luteum*, clay. A composition employed in experimental or practical Chemistry in closing the joints of instruments.

LYCOPODIA'CEÆ, Bot., Gr., Λυκος (*Lukos*), Wolf, and πους (*pous*), foot. A natural Order of Plants, so called from one of the species formerly called Wolf's-foot. It contains the *Club Moss*, *Ground Pine*, &c.

LYCO'SA, Ent., Gr., Λυκος (*Lukos*), a Wolf. A genus of Spiders that construct galleries in the Earth, which they line with silk. They run fast and are well named, being fierce and warlike. The celebrated *Tarantula* is one of them.

LYMPH, Anat., Lat., *lympha*, a watery fluid, from the Gr., Νυμφη (*Numphe*), a Nymph, one of the protecting deities of the streams. The second of the fluids which go to the blood.

LYMPHAT'ICS, Anat., same etym., as lymph. Delicate transparent vessels which absorb lymph and convey it to the blood. *Lymphatic* is also applied to glands.

LY'RATE, Bot., Lat., *lyra*, a lyre. Shaped like a lyre.

MACERA'TION, Anat., Fr., *maceration*, from Lat., *macerare*, to soften, to wear away. A term applied in practical Anatomy to the effects of long-continued digestion of organs in water, by which soft parts are altogether removed from the hard ones (the bones, for instance) without injury to the more delicate processes, &c., or by which the constituents of the former are separated from each other—the layers of the skin, for instance.

MACHI'NE, Nat. Ph., Phys., &c., Gr., μηχανη (*mechane*), art, invention, machine. Any instrument more or less complicated for any purpose whatever. The animal body is a machine of the most complicated and perfect description.

MACRODAC'TYLI, see *Macrodactylous*. The fifth Order of wading Birds, or the Grallatoriæ. It includes the *Surgeons*, &c., all the genera having very long toes.

MACRODAC'TYLOUS, Orn., Gr., μακρος (*makros*), long, and δακτυλος (*daktulos*), finger. Long-fingered, or rather long-toed, as it is applied to Birds.

MACROP'TEROUS, Orn., Gr., μακρος (*makros*), long, and πτερον (*pteron*), wing. Long-winged. A term applied to certain Birds remarkable for their length of wing and powers of flight.

MACROU'RA, Crust., Gr., μακρος (*makros*), long, and ουρα (*oura*), a tail. Long tails. The second Family of the decapodous Crustacea. It contains the *Cray-fish*, *Prawns*, *Shrimps*, *Lobster*, &c.

MAC'ULÆ, Ast., Lat., *macula*, a spot, or stain. Dark spots frequently visible on the disc of the Sun.

MAC'ULATED, Nat. Hist., Lat., *maculatus*, spotted. A term applied to Plants and Animals when marked with spots.

MAD'REPOUS, Rad., Fr., *madré*, spotted, and *pōres*, pores. A term commonly applied to the coral of the corticated Polypi; so called because the calcareous axis is spotted, as it were, with little stellate depressions.

MÆNI'DES, Icth., Lat., *Mæna* (Μαινις), an Anchovy, or small sea-fish. The fifth family of acanthopterygious Fishes.

MAGNETOM'ETER, Nat. Ph., Gr., *magnetism*, q. v., and μετρον (*metron*), measure. An instrument for determining the intensity of terrestrial magnetism.

MAGNE'SIUM, Chem., Lat., *magnesius*, from the Gr., μαγνης (*magnes*), the loadstone—magnesian earth; so called, it is said, because magnesia adheres to the tongue like iron to the loadstone. Magnesium is one of the new metals, has the colour and lustre of silver, is malleable, and fuses at a red heat.

MAG'NETISM, Chem., Gr., μαγνης (*magnes*), the magnet. A name given to the effects produced by the magnet and, by analogy, to some imponderable fluid analogous to electricity, which is presumed by some to be the cause of all organic action.

MAGNOLIA'CEÆ, Bot., *Magnol*, the name of a Botanist. A natural Order of polypetalous Exogens. It contains not only the *Magnolias*, but the *Star-Anise*, &c.

MAG'NUM, OS, Anat., Lat., *magnum*, great. The third Bone of the second row of carpals. The term Magnum is also applied to the great *foramen* of the occipital bone, which transmits the spinal marrow, &c., to the brain.

MALACODER'MI, Ent., Gr., μαλακος (*malakos*), soft, and δερμα (*derma*), skin. A Tribe of serricorn, coleopterous Insects, so called from their soft and flexible body.

MALACOL'OGY, Zool., Gr., μαλακος (*malakos*), soft, and λογος (*logos*), a treatise. That branch of Zoology which treats of the soft Animals, or the Mollusca.

MALACOPTERYG'II, Icth., Gr., μαλακος (*malakos*), soft, and πτερυξ (*pterux*), a fin. Soft-finned. The second division of ordinary Fishes.

MALACOPTERYG'IOUS, Icth., see *Malacopterygii*. Relating to the Malacopterygii.

MALACOSTRA'CA, Crust., Gr., μαλακος (*malakos*), soft, and οστρακον (*ostrakon*), shell. Soft-shelled. The first section of the Crustacea, so called, originally, because the shell is less hard in these animals than in the testaceous Mollusca.

MA'LAR, Anat., Lat., *mala*, (according to Noël, a contraction of *maxilla*,) the cheek. Relating to the cheek, as *malar bone*, &c.

MALA'RIA, Hyg., It., *mularia*, bad air. A peculiar and occult principle developed in marshy districts—the *marsh poison*, or *miasm* of our authors.

MALLE'OLAR, Anat., see *Malleolus*. Relating to the Malleolus, as the *malleolar arteries*, &c.

MALLE'OLUS, Anat., Lat., dimin., of *malleus*, a hammer. A process so called at the inferior portion of the tibia and fibula, one called the *external malleolus*, the other the *internal*. They act as guards to the joint.

MAL'LEUS, Anat., Lat., *malleus*, a hammer. The first of the four pieces that compose the tympanal chain of bones ; so called from some resemblance in shape to a hammer.

MALVA'CEÆ, Bot., Lat., *Malva*, the Mallow. A natural Order of Plants. It contains the *Mallow*, *Hollyhock*, *Cotton*, &c.

MAM'MÆ, Anat., Gr., μαμμα (*mamma*), breast, udder. Glands so called, which secrete milk. As this same μαμμα signified, among the ancient Greeks, both the glands in question, and *mother*, or mamma, it is impossible to say to which the latter term was first applied.

MAMMA'LIA, see *Mammiferous*. The first Class of vertebrated Animals.

MAMMAL'OGY, Zool., Gr., μαμμα (*mamma*), milch-gland, and λογος (*logos*), a treatise. That branch of Zoology which restricts its researches to the Mammalia.

MAMMIF'EROUS, Zool., Lat., *mamma*, a milch-gland, and *ferre*, to carry. A term applied to all Animals that nourish their young with milk.

MAMMIL'LÆ, Zool., a diminutive of *mamma*. Little mammæ. A term applied by analogy to all small conical projections.

MAN'DIBLE, Ent., Lat., *mandere*, to eat, to crush. A term restricted to the two superior and lateral portions of the Mouth, the two inferior being distinguished by the term *maxillæ*, or true jaws, the latter alone bearing palpi.

MANDUCA'TION, Phys., Lat., *manducare*, to chew, to crush. The act of mastication, or chewing.

MANGANE'SE, Chem., Gr., μαγνης (*magnes*), loadstone, or magnet. A grayish-white Metal, somewhat resembling cast-iron, but which soon oxidates in air, falling into a black powder.

MAN'TLE, Mal., Gr., μανδυας (*manduas*), a cloak, or mantle. A development of the skin of the body of the Mollusca or soft Animals—the Oyster, for instance—which covers their body and assumes various forms.

MARCES'CENT, Bot., Lat., *marcescere*, to wither. Persistent, but fading and withering.

MARGAR'IC, Chem., Gr., μαργαριτη (*margarite*), a pearl. An Acid, so called, obtained from the concrete portion (*margarine*) of certain oils by the action of alkalies.

MARGARIT'IC, Chem., Gr., μαργαριτη (*margarite*), a pearl. An Acid, so called from its pearly lustre, that forms the principal part of the solid portion of human fat and vegetable fixed oils.

MARL, Min., Wel., *marl*. A mineral substance which, from its friable nature, never occurs in form of rocks, but in beds or deposits near the surface of the Earth. It consists of carbonate of lime and clay.

MARSU'PIAL, Mam., Lat., *marsupium*, a game-bag, pouch. Furnished with a pouch.

MARSUPIA'LIA, Mam., see *Marsupial*. The fourth Order of the Mammalia, consisting of the pouched Mammals, such as the *Opossum*, *Potoroo*, *Kanguroo*, &c.

MARSU'PIUM, Orn., Lat., see *Pecten*.

MASTICA'TION, Phys., Gr., μαστιχαω (*mastichaō*), to chew. The act of chewing or comminuting food, the first of the complicated functions of the digestive organs.

MAS'TODON, Mam., Gr., μαστος (*mastos*), a nipple, and οδους (*odous*), tooth. An extinct genus of Proboscidians closely allied to the Elephant, but of gigantic dimensions; so called from the conoidal projections of their molars—the Mammoth, a Tartar name.

MAS'TOID, Anat., Gr., μαστος (*mastos*), a nipple, and ειδος (*eidos*), form. Nipple-shaped. A term applied to a process of the Temporal Bone, and to cells, muscles, &c., connected with it.

MAS'SETER, Anat., Gr., μασσαομαι (*massaomai*), to eat. One of a pair of powerful Muscles originating from the superior maxillary bone, and inserted into the lower one on the ramus and angle. It draws the lower jaw up, and thus acts in mastication.

MATHEMAT'ICS, Gr., μαθημα (*mathema*), science, from μανθανω (*manthanō*), to learn. That Science which investigates the consequences strictly deducible from any given or admitted relations between magnitudes or numbers.

MAT'TER, Nat. Ph., Lat., *materia*, from *mater* (Gr., μητηρ), mother. That which has length, breadth, gravity, &c.—that which composes any thing. See *Atom.*

MAXIL'LA, Anat., Ent., Lat., *maxilla*, a jaw. The maxillæ in the Mammalia, &c., is a term applied to both Jaws, but in Insects to the two lower ones only, they having four. See *Mandible.*

MAX'ILLARY, Anat., Lat., *maxilla*, a jaw. Relating to the Jaws, or maxillæ, as *maxillary nerves*, *maxillary process*, &c.

MEA'TUS, Anat., Lat., *meatus*, a passage. A term applied to various openings or canals, such as the *auditory meatus*, *meatus auditorius externus*, &c.

MECON'IC, Chem., Gr., Μηκων (*Mekōn*), the Poppy. An Acid so called, with which morphia is combined in opium. Its salts are termed *Meconates.*

MECHAN'ICS, Nat., Ph., Gr., μηχανικος (*mechanikos*), from μηχανη (*mechane*), machine. A branch of Nat. Ph. which treats of forces and their action on bodies, both directly and through the medium of machines.

ME'DIAN, Anat., Lat., *medium*, the middle. A longitudinal line, either real or imaginary, that divides a body into two equal parts.

MEDIAS'TINUM, Anat., Lat., *medium*, the middle. A duplicature of the Pleura forming a membranous septum between the right and left thoracic cavities, and divided into anterior and posterior.

ME'DIUM, Nat. Ph., Lat., *medium*, a transmitter. The matter in which bodies exist, or through which they move, in passing. Air is, perhaps, the most universal of all media, that of Newton's hypothetical one excepted.

MEDUL'LA, Anat., Lat., *medulla* (μυελος), marrow. A term applied to the spinal portion of the cerebro-spinal Axis, as well as to its parts, as the *Medulla Oblongata*, *Medulla Spinalis*, &c. Also to the *marrow* of the long bones.

MEDUSA'RIA, Rad., Gr., Μεδουσα (*Medousa*), the chief of the Gorgons. A numerous Tribe of Acalepha, q. v.; so called, because, from the centre or margin of the gelatinous umbel or disk formed by the body, numerous tentacula radiate like the snakes from the fabled head of Medusa.

MEGALICH'THYS, Icth., Gr., μεγας (*megas*), great, and ιχθυς (*ichthus*), fish. A genus of large fossil Fishes.

MEGALO'NYX, Mam., Gr., μεγας (*megas*), great, and ονυξ (*onux*), claw. An enormous fossil Mammal belonging to the Edentata; so called from the size of its claws.

MEGALOSAU'RUS, Herp., Gr., μεγας (*megas*), great, and Σαυρος (*Sauros*), Lizard. A genus of gigantic fossil Saurians discovered by Buckland in oolitic slate. The specimens were from forty to fifty feet in length.

MEG'ASCOPE, Opt., Gr., μεγας (*megas*), great, and σκοπεω (*skopeō*), I observe. An optical instrument of great magnifying power.

MEGASTO'MA, Mal., Gr., μεγας (*megas*), great, and στομα (*stoma*), mouth. A Family of univalve Mollusca, so called from their wide mouth or aperture.

MEGATHE'RIUM, Mam., Gr., μεγας (*megas*), great, and θηριον (*therion*), wild beast. A genus of gigantic fossil Edentata. This animal must have had a body twelve feet long and eight feet high, its feet nearly one yard in length, &c. Both Megatherium and Megalonyx find their place between the Sloth and Armadillo.

MELANTHA'CEÆ, Bot., Gr., μελας (*melas*), black, and ανθος (*anthos*), flower. A natural Order of Plants. It contains the *Colchicum*, *Veratrum*, &c.

MELASO'MA, Ent., Gr., μελας (*melas*), black, and σωμα (*sōma*), body. A Tribe of heteromerous Coleoptera, including many which are dark coloured as well as black.

MELASTOMA'CEÆ, Bot., Gr., μελας (*melas*), black, and στομα (*stoma*), mouth. A natural Order of Plants, so called because the fruits of some of the genera stain the lips black when eaten. The juice of the berries of one species is used for ink.

MELIA'CEÆ, Bot., Gr., Μελια (*Melia*), the Ash, so called by the Greeks. A natural Order of Plants composed of trees and shrubs.

MELLIT'IC, Chem., Gr., μελι (*meli*), honey. An Acid, so called, obtained from a yellow crystallized mineral called Mellite, same etym., and λιθος (*lithos*), a stone.

MEM'BRANE, Anat., Lat., *membrana*, from *membrum* (μελος), a member, or part. A thin flat organ resembling an elastic web, varying in tissue and functions.

MEM'ORY, Phys.. Lat., *memoria* (μνεια), memory. A cerebral function, or the faculty possessed by the brain of reproducing impressions previously conveyed to it by the organs of the senses, and appreciated by it.

MENIN'GES, Anat., Gr., μηνιγξ (*menigx*), a membrane. A term restricted to the three membranes which envelope the brain and spinal marrow, viz., the *Dura mater*, *Tunica arachnoidea*, and the *Pia mater*.

MENIS'CUS, Opt., Gr., μηνισκος (*meniskos*), a little crescent. One of the six sorts of lenses—bounded by a concave and convex spherical surface, which meet if continued.

MENISPREMA'CEÆ, Bot., Gr., Μηνη (*Mene*), the Moon. A natural Order of Plants, so called from the Moon-like shape of their seeds.

MENOBRANCH'US, Herp., Gr., μενω (*menō*), I remain, and βραγχια (*bragchia*), gills. A genus of batrachian Reptiles furnished with both *gills* and *lungs*, and consequently fitted to respire in *air* and *water*. This and a *very* few neighbouring genera may be said to be the only truly amphibious animals known.

MENT'UM, Anat., Lat., *mentum*, the chin. The middle and anterior portion of the lower Jaw; hence *mental*, as the *mental artery*, &c.

MEPHIT'IC, Hyg., Lat., *mephitis*, a stench, from the Arabic *nĕpĕh*, to exhale. Any odour or exhalation which is disagreeable or unwholesome.

MERCAP'TAN, Chem., Lat., *mercurium*, mercury and *captans*, laying hold of. A colourless, highly fluid ether—like liquid, with a most nauseous and penetrating odour of garlic. The oxide of mercury is instantly converted by it into a salt of the class of sulphur salt; hence its name.

MER'CURY, Chem., Lat., *Mercurius*, Mercury, that is, the Egyptian Mercury or Hermes Trismegistes, or the thrice great Hermes. A Metal well known as Quicksilver, to which this name was applied by the alchemists, in honour of (*the*) Mercury.

ME'RICARP, Bot., Gr., μερις (*meris*), a part, and καρπος (*karpos*), fruit. The half of a cremocarp, or a single, separate carpel.

MERID'IAN, Ast., Lat., *medius*, middle, and *dies*, day. A great circle of the sphere passing through the poles of the Earth perpendicular to the ecliptic.

MES'ENTERY, Anat., Gr., μεσος (*mesos*), middle, and εντερον (*enteron*), intestine. A duplicature of the Peritoneum which supports the small intestine.

MESOCO'LON, Anat., Gr., μεσος (*mesos*), middle, and χωιλον (*chǭilon*), the colon. A duplicature of the Peritoneum, which fixes the colon to the walls of the abdomen—it receives different names in different positions, such as the *transverse*, *right lumbar*, &c.

MESOTHO'RAX, Ent., Gr., μεσος (*mesos*), the middle, and θωραξ (*thōrax*), chest. The middle of the three segments constituting the thorax of Insects.

METABO'LIAN, Ent., Gr., μεταβολη (*metabole*), a change. A term applied to those Insects which pass through successive stages of development, called their *Metamorphosis*, q. v.

METACAR'PAL, Anat., see *Metacarpus*. Relating to the Metacarpus.

METACAR'PUS, Anat., Gr., μετα (*meta*), after, and καρπος (*karpos*), the wrist. The five Bones composing the back of the hand; so called because they are placed after the carpals; hence their usual name of the *Metacarpals*.

MET'AL, Chem., Gr., μεταλλον (*metallon*), metal. A Class of simple bodies possessing great specific gravity, insolubility in water, opacity, &c.

METALLIN'EA, Geol., Gr., μεταλλον (*metallon*), metal. The eighth Order of the second Class of Minerals.

MET'ALLOIDS, Chem., Gr., μεταλλον (*metallon*), metal, and ειδος (*eidos*), form. A term applied by chemists to inflammable non-metallic bodies, such as Sulphur. It is also sometimes applied to the metallic Bases of the fixed alkalies.

METAMOR'PHIC, Geol., Gr., μετα (*meta*), a preposition indicating, here, a change, and μορφη (*morphe*), form. A Class of crystalline stratified Rocks; so called from the hypothesis which supposes them to have been formed from sedimentary deposits subsequently altered or changed by subterranean heat.

METAMOR'PHOSIS, Ent., Gr., μετα (*meta*), a change, and μορφη (*morphe*), shape, or figure, whence μεταμορφωσις, transformation. A term applied to the development of parts existing in the larva of an Insect which changes it to the Imago, or perfect animal.

METATAR'SAL, Anat., see *Metatarsus*. Relating to the Metatarsus.

METATAR'SUS, Anat., Gr., μετα (*meta*), after, and ταρσος (*tarsos*), the tarsus. The five Bones (analogous to the metacarpals of the hand) that form the instep.

METATHO'RAX, Ent., Gr., μετα (*meta*), after, and θωραξ (*thorax*), chest. The third or posterior segment of the Thorax of an Insect.

ME'TEOR, Ast., Gr., μετα (*meta*), over or above, and αειρω (*aeirō*), I rise. Transitory or evanescent bodies that rise in the air, or form there, and quickly disappear.

ME'TEORS, Nat. Ph., Gr., μετεωρος (*meteōros*), aerial. Evanescent phenomena originating in the atmosphere.

METEOROL'OGY, Nat. Ph., Gr., μετεωρον (*meteōron*), meteor, and λογος (*logos*), a treatise. That branch of Nat. Ph. which investigates the origin, &c., of meteors.

METH'OD, Nat. Hist., Gr., μετα (*meta*), by, and ὁδος (*hodos*), a way. A method or manner of arriving at a result by the most certain way. It is synonymous with System. There is only one that is perfect, and that is a natural one, or one in which all orders of the same class are placed nearer to each other than to those of any other class, all families of the same order nearer to each other than to those of any other order, all genera of the same family nearer to each other than to those of any other family, and all species of the same genus nearer to each other than to those of any other genus.

METHYLE'NE, Chem., Gr., μεθυ (*methu*), wine, and ὑλη (*hule*), wood. Wood-spirit, or the hydrated oxide of a new radical called *methyl*. It is obtained from the dry distillation of wood, and is a volatile, combustible spirit, soluble in water.

METON'IC, Ast., from *Meton*, the astronomer. A cycle, so called, of 6,940 days, or about 19 years.

MIAS'MA, Hyg., Gr., μιαινο (*miaino*), I pollute, or stain. An occult poison generated in marshy districts. It is synonymous with *malaria*, *marsh-poison*, &c.

MI'CA, Min., Lat., *micare*, to shine. A well-known Mineral found in thin, smooth, transparent, and elastic laminæ, vulgarly called Isinglass.

MI'CROCOSM, Nat. Hist., Gr., μικρος (*mikros*), little, and κοσμος (*kosmos*), world. A little world. Man has been called one microcosm, and, since the improvement of the microscope, we may well affirm that a single drop of ditch water is another.

MI'CRODON, Icth., Gr., μικρος (*mikros*), small, and οδους (*odous*), tooth. A genus of fossil Fishes, so called by Agassiz.

MICROM'ETER, Ast., Nat. Hist., Gr., μικρος (*mikros*), little, and μετρον (*metron*), a measure. An instrument for measuring very minute spaces or diameters, used by astronomers and naturalists.

MI'CROPYLE, Bot., Gr., πυλη (*pule*), a door or pass, and μικρος (*mikros*), little. A term applied to a small aperture in the apex of the ovule of a Seed—that is, in the coats which envelope it.

MI'CROSCOPE, Opt., Gr., μικρος (*mikros*), little, and σκοπεω (*skopeō*), I observe. An instrument by which objects, perfectly invisible to the naked eye, are rendered so perceptible that even their structure can be unravelled.

MICROSCOP'ICAL, Opt., see *Microscope.* Relating to a Microscope

MEL'ANITE, Min., Gr., μελας (*melas*), black. The black Garnet. sh'd be in p. 146

MINERAL'OGY, Nat. Hist., Lat., *minera*, mineral or mines, and Gr., λογος (*logos*), treatise. That branch of Nat. Hist. which considers the composition, properties, appearance, and relations of mineral bodies.

MI'OCENE, Geol., Gr., μειων (*meiōn*), less, and καινος (*kainos*), recent. Less recent. The Second (in order of age) of the four Groups of tertiary strata. See *Eocene.*

MI'TRAL, Anat., Gr., μιτρα (*mitra*), a mitre, a bandage or head-dress worn by the Grecian ladies resembling a Bishop's cap or mitre. Valves, so called from their form, between the left auricle and ventricle of the Heart.

MIT'RIFORM, Bot., see *Mitral.* Shaped like a mitre.

MO'LARS, Anat., Lat., *mola* (Gr., μυλη), a mill-stone. Flat-crowned cheek Teeth fitted for grinding.

MOLASS'E, Geol., from Fr., *molasse*, too soft. A formation of soft, green Sandstone, so called, in the lower part of Switzerland.

MOL'ECULE, Anat., &c., Lat., *molecula*, a particle of any thing—an atom.

MOLLUS'CA, Zool., Lat., *molluscus*, soft. Animals composing the Second great Division of the Animal Kingdom. They are so called from their softness, which arises from the absence of a skeleton. Some of them, however, are furnished with shells—the Oyster, for instance—and are then called *testaceous Mollusca.*

MOLYBDE'NUM, Min., μολυβδος (*molubdos*), lead, because it was at first supposed to be an ore of that metal. The acid is called *molybdic*, and its compounds *molybdates.*

MOMEN'TUM, Nat. Ph., Lat., *moveo*, I move. The momentum of a moving body, or the measure of the moving power is the product of the velocity multiplied by the weight. It is synonymous with quantity of motion.

MO'NADS, Zool., Gr., μοναϛ (*monas*), unity, from μονοϛ (*monos*), alone. A *supposed* simple and indivisible being, of which, according to Leibnitz, all other beings are composed. A group of *actual* animalcula, some of which are but the $\frac{30}{1000}$ of an inch in diameter.

MONADEL'PHIA, Bot., see *Monadelphous*. The sixteenth Class of Plants in the Linnæan system.

MONADEL'PHOUS, Bot., Gr., μονοϛ (*monos*), one, and αδελφοϛ (*adelphos*), brother. A term expressive of a particular mode of union between the filaments of the stamens of certain Flowers which are united at the base *only*, and thus form one brotherhood.

MONAN'DRIA, Bot., Gr., μονοϛ (*monos*), one, and ανηρ (*aner*), male. The first Class of Plants, according to the Linnæan system. They were so called because the flowers have but one stamen.

MONAN'DROUS, Bot., see *Monandria*. Having but one stamen.

MON'GOL, Mam., Tart., *mung*, gloomy. One of the three well-marked races of Man, embracing the Tartars, Chinese, Japanese, &c. It is said to have taken its name from *Mong'l*, a son of Alanza; so called on account of his gloomy disposition.

MONIL'IFORM, Ent., &c., Lat., *monile*, a necklace, and *forma*, form. Like a necklace, or string of beads. A term applied to Antennæ, &c.

MONOCHLAMYD'EOUS, Bot., Gr., μονοϛ (*monos*), one, χλαμυϛ (*chlamus*), a cloak, and ειδοϛ (*eidos*), form. A term applied to Flowers destitute of floral envelopes, both calyx and corolla being absent.

MONOCHROMAT'IC, Opt., Gr., μονοϛ (*monos*), one, and χρωμα (*chrōma*), colour. Of one colour. A term applied to a Lamp in which the fuel consists of spirits of wine, with a solution of common salt; when ignited, the flame is yellow, (all other rays being excluded,) the consequence of which is, that every object seen by its reflection is either yellow or black.

MONOCOTYLED'ONOUS, Bot., Gr., μονος (*monos*), one, and κοτυληδων (*kotuledōn*), a cotyledon. Plants that have but one cotyledon, or, at least, but one perfect one.

MONODAC'TYLE, Crust., Gr., μονος (*monos*), single, and δακτυλος (*daktulos*), finger. One-fingered. A term applied to those chelæ or claws of a crustaceous Animal, which have but one limb, or finger.

MON'ODON, Mam., Gr., μονος (*monos*), one, and οδους (*odous*), tooth. The name applied to the *Narwhal*, because, of its two tusks, one only is developed, and that projects from the end of the snout in a straight line like a horn. If this be broken, the second one is produced.

MONŒ'CIA, Bot., Gr., μονος (*monos*), one, and οικια (*oikia*), house. The twenty-first Class of Plants in the Linnæan system; so called because the stamens and pistil are found in the same flower.

MONŒ'CIOUS, Bot., Gr., see *Monœcia*.

MONOGAM'IA, Bot., Gr., μονος (*monos*), one, and γαμος (*gamos*), nuptials. The sixth Order of the nineteenth Class of Linnæus; so called because the anthers in those flowers are all united.

MONOGAS'TRIC, Zoöl., Gr., μονος (*monos*), one, and γαστηρ (*gaster*), a stomach. Having but one stomach. A term applied to Man and some other Animals. Some animals, as Birds, have three—others again, the Ruminantia, four—whilst low down in the scale, we find them very numerous. See *Polygastrics*.

MON'OGRAPH, Nat. Hist., Gr., μονος (*monos*), one, and γραφη (*graphe*), a treatise. A history of *one* species, genus, or family of bodies, mineral, vegetable, or animal.

MONOGYN'IA, Bot., Gr., μονος (*manos*), one, and γυνη (*gune*), female. The first Order of the first thirteen Classes of Linnæus, embracing all plants contained in them, which have but one style in each flower.

MONOG'YNOUS, Bot., see *Monogynia*.

MONOMY'ARY, Mal., Gr., μονος (*monos*), one, and μυων (*muōn*), a muscle. A term applied by Lamarck to all bivalve Mollusca that have *one* large muscular impression in each valve.

MONOPET'ALOUS, Bot., Gr., μονος (*monos*), one, and πεταλον (*petalon*), a petal. A term applied to those exogenous Plants in which the petals are united.

MONOPHYL'LOUS, Bot., Gr., μονος (*monos*), one, and φυλλον (*phullon*), leaf. Being in one leaf.

MONOSEP'ALOUS, Bot., Gr., μονος (*monos*), one, and Lat., *sepes*, a hedge, an inclosure, a sepal. A term applied to Flowers of which the sepals are so united as to form one piece, as in the Morning-Glory.

MON'STER, Nat. Hist., Lat., *monstrum*, a monster. An organic body with a greater or less number of parts than in the usual and normal condition. A *double* flower, for instance, is as much a monster as a Calf with two heads.

MORA'INES, Geol., Fr., *moraine*, a cordon or coping of mortar and gravel round a wall. A term applied by Geologists to long lines of gravel and stones, detached from the precipices of the Alps, which settle on the sides and at the foot of glaciers.

MORPHOL'OGY, Bot., Gr., μορφη (*morphe*), form, and λογος (*logos*), a treatise. That branch of Botany which treats of the modifications or transformation of the organs of Plants.

MOTIL'ITY, Phys., &c., Lat., *motilitas*, the power of moving.

MU'CILAGE, Chem., see *Gum*, with which it is synonymous.

MU'COUS, Anat., Gr., μυξα (*muxa*), mucus. A term applied to a Membrane furnished with mucus, and to the glands which secrete it.

MU'CRONATE, Bot., Mal., Lat., *mucronatus*, ending in a point. A term applied to Leaves with a long narrow point, and to Shells that end in the same way.

MU'CUS, Anat., Gr., μυξα (*muxa*), mucus. A slightly viscid fluid secreted by the mucous glands, that is somewhat analogous to a thin mucilage. It differs in its appearance in different parts of the body.

MUGILOI'DES, Icth., Lat., *Mugil*, the Mullet. The eleventh Order of the Acanthopterygii.

MULTILOC'ULAR, Mal., Lat., *multus*, many, and *loculus*, a little chamber. Many-chambered. A term applied to Shells divided into several cavities.

MUL'TIVALVE, Mal., Lat., *multus*, numerous, and *valvæ*, literally, folding doors or shutters. A term applied to such of the testaceous Mollusca as are furnished with more than two valves.

MU'RICATE, Lat., *muricatus*, caltrop-like. Furnished with short, hard excrescences.

MUS'CI, Bot., Lat., *Muscus*, Moss. A natural Order of Plants. It contains the various mosses, such as *Hypnum*, *Sphangum*, &c.

MUS'CLE, Anat., Gr., Μυς (*Mus*), a Rat, or Mouse. A singular derivation, but so given by Morin and other learned etymologists. A muscle may look like a flayed Rat, because the fasciculi of its muscles are visible; but the more probable root of this word is from μυειν (*muein*), to move, a function peculiar to muscles. Organs of motion of various forms and colour, which, by their contraction, produce all the movements of the body—of the fluids, as well as of the solids.

MU'TICOUS, Bot., Lat., *muticus*, beardless. Having no point.

MY'LO, Anat., Gr., μυλη (*mule*), the jaw. A term frequently applied, in conjunction with others, to Muscles connected with the jaw, as in *Mylo-glossus*, *Mylo-hyoideus*, &c.

MYOL'OGY, Anat., μυων (*muōn*), a muscle, and λογος (*logos*), a treatise. That branch of Anatomy which treats of the Muscles.

MYRIAP'ODA, Ent., Gr., μυρια (*muria*), ten thousand, and πους (*pous*), foot. The first Order of Insects, commonly called *Centipedes*.

MYRICA'CEÆ, Bot., Gr., Μυρικη (*Murike*), a species of Heath so called by the Greeks. A natural Order of Plants. It includes, among others, the *Candleberry*, which yields a natural wax.

MYRSINA'CEÆ, Bot., Gr., Μυρσινος (*Mursinos*), a shrub so called, probably another name for the Myrtle. A natural Order of Plants.

MYRTA'CEÆ, Bot., Gr., Μυρτος (*Murtos*), the Myrtle. A natural Order of Plants. A beautiful and fragrant group of Plants, including not only what are usually called Myrtle, but the *Pomegranate*, *Guava*, &c.

NA'CRE, Mal., Fr., *nacre*, mother of pearl. The well-known substance which forms the internal layer of Shells. It is of various, and, sometimes, gorgeous colours.

NA'DIR, Ast., Ar., نظير (*nadir*), opposite. The point in the heavens directly under foot, and, consequently, *opposite* to the Zenith.

NAIADA'CEÆ, Bot., Lat., *Naïades*—from the Gr., ναω (*naō*), to flow—Naïads, or Nymphs, that preside over streams and fountains. A natural Order of Plants. It includes a few unimportant water plants, such as *Pond-weed*, *Najas*, &c.

NAPH'THALINE, Chem., Gr., ναφθα (*naphtha*). A transparent and colourless crystalline substance obtained from Tar; also at a very high temperature by alcohol and organic matters in general.

NAP'IFORM, Bot., Lat., *Napus*, a Turnip, and *forma*, shape. A term applied to roots swollen at base, and broader than long.

NA'RES, Anat., Lat., *naris*, the nostril. The nostrils.

NA'SAL, Anat., Lat., *nasus*, the nose. Relating to the Nose.

NA'TANT, Bot., Lat., *natare*, to swim. Swimming or floating.

NATA'TION, Phys., Lat., *natare*, to swim. Swimming. A peculiar sort of motion for which certain bodies were originally designed, as is evident from their structure—ex., Fishes.

NA'TATORY, Icth., Lat., *natare*, to swim. A term applied to a large Air-vessel—*natatory vessel*—found directly beneath the dorsal vertebræ of certain Fishes. By its compression or dilatation, the animal is rendered heavier, or the reverse, and sinks or rises accordingly. It is vulgarly termed the Swimming-bladder.

NA'TRIUM, Chem., see its synon., *Sodium*.

NAUTILI'DÆ, Mal., Gr., Ναυτιλος (*Nautilos*), the Nautilus. A Family of cephalopodous Mollusca, with siphoniferous shells, &c., and of which the *Nautilus* is the type.

NAVIC'ULAR, Bot., Lat., *navicula*, a little boat. Boat-shaped.

NAVICULA'RE, Anat., Lat., *navicula*, a little boat. The *Naviculare*, or *Os Naviculare*, is one of the seven bones of the tarsus.

NEB'ULÆ, Ast., Lat., *nebula* (Gr., νεφελη), a fog, or cloud. Cloudy Stars, so called from the appearance they present to the naked eye—through the telescope they are seen to present one or more stars.

NECROPH'ORI, Ent., Gr., νεκρος (*nekros*), a corpse, and φερω (*pherō*), to carry. A group of coleopterous Insects, so called because, after depositing their eggs in the dead bodies of small birds, quadrupeds, &c., they carefully bury them.

NEC'TARY, Bot., Lat., *nectar*—from the Gr., νη (*ne*), negative, and κτεινω (*kteinō*), to kill—drink of the gods. The Nectaries of the old Botanists are either petals of singular and unusual forms, such as the spurs of the Larkspur, petals passing into stamens, or transformed stamens.

NEC'TOCYST, Icth., Gr., νεω or νηχομαι (*neō* or *nechomai*), to swim, and κυστις (*kustis*), a bladder. A new term which I propose for adoption in place of natatory vessel or swimming bladder. See *Natatory*.

NE'GRO, Mam., Lat., *niger*, black. One of the three well-marked races of Man.

NEMOÇ'ERA, Ent., νημα (*nema*), a thread, and κερας (*keras*), horn. A tribe of dipterous Insects, so called from their long filiform antennæ.

NEM'ORAL, Mal., Lat., *nemoralis*, belonging to woods, or forests. Applied to certain land Shells.

NEPTU'NIAN, Geol., Lat., *Neptunus*, Neptune, the mythological God of the Seas. A celebrated theory of Werner, so called, which maintained that the globe was at first enveloped by a universal chaotic ocean, holding in solution all the material of which rocks were afterwards formed. See *Plutonic*.

NERVE, Anat., Gr., νευρον (*neuron*), a string. A term applied by the ancients to tendons, ligaments, &c., but now restricted to rounded or flattened cords of nervous matter. There are forty-two pairs in the human subject, exclusive of those that belong to the Great Sympathetic.

NEURASTHE'NIA, Hyg., Gr., νευρον (*neuron*), a nerve, and ασθενεια (*astheneia*), weakness. Want of nervous energy.

NEURILEM'MA, Anat., Gr., νευρον (*neuron*), a nerve, and λεμμα (*lemma*), coat. A fine transparent membrane that envelopes the nerves.

NEUROL'OGY, Anat., Gr., νευρον (*neuron*), a nerve, and λογος (*logos*), a treatise. That branch of Anatomy which treats of the nervous system.

NEUROP'TERA, Ent., Gr., νευρον (*neuron*), nerve, and πτερον (*pteron*), wing. Nerve-winged. The eighth Order of Insects, so called because their membranous wings are finely reticulated by what are called *nerves*, but which, in fact, are the trunks and branches of æriferous vessels.

NICK'EL, Chem., Ger., *nickel*, false. A name bestowed on the arsenical Ore which contains the metal, by the miners, who, from its resemblance in colour to copper, endeavoured in vain to extract that metal from it. It is silver-white and very ductile, qualities which render it valuable as an alloy.

NICTA'TION, Phys., Lat., *nictare*, to wink. The act of winking, a rapid motion of the eyelids, by which the tears are spread over the anterior portion of the eye, thus removing dust, &c.

NIDIFICA'TION, Orn., Lat., *nidus*, nest, and *facio*, I make. The process of building a nest, or the period at which it is effected.

NI'TENT, Mal., Lat., *nitens*, brilliant, polished. Very smooth or highly polished.

NI'TRATES, Chem., salts of nitric acid.

NI'TRE, Chem., Gr., νιτρον (*nitron*), nitre, saltpetre. This salt, chemically known as the nitrate of potash, is anhydrous, is not deliquescent, and is well known for its cooling antiseptic qualities, and as a chief ingredient in gunpowder, of which it forms about seventy-five parts in the hundred. It is spontaneously formed in the earth by the decomposition of animal matters containing nitrogen.

NI'TRIC AÇ'ID, Chem., see *Nitrogen.* One of the most corrosive of all acids, obtained from the decomposition of nitre by oil of vitriol, which unites with the potash and liberates the nitric acid.

NI'TRITES, Chem., salts of nitrous acid.

NI'TROGEN, Chem., Gr., νιτρον (*nitron*), nitre, and γινομαι (*ginomai*), to produce. A tasteless, inodorous gas, constituting seventy-nine parts out of the hundred of atmospheric air. It forms a considerable part of nitric acid, and is so fatal when inspired that it is called *Azote*, q. v.

NI'TROUS AÇ'ID, Chem., see *Nitrogen.* An acid formed of two volumes of nitric oxide and one of oxygen.

NOCTUR'NA, Ent., Lat., *nocturnus*, nightly. The third Family of the Lepidoptera. It includes the interminable suite of *Moths*, so called because they never fly by day, and usually in the night.

NOCTUR'NÆ, Orn., Lat., *nocturnus*, nightly. The second Family of the Rapaceæ. It includes the *Owls*.

NODES, Ast., Lat., *nodus*, a knot. The two opposite points of a planet's orbit, in which it intersects the ecliptic. The point of decussation, as the planet proceeds to the north, is called the *Ascending Node*, and the opposite one the *Descending Node.*

NOMAD'IC, Zool., Gr., νομαδες (*nomades*), from νομευς (*nomeus*), a shepherd. A term applied to the wandering Tribes of Scythians, Lybians, &c., which led a pastoral life.

NO'MENCLATURE, Nat. Hist., Gr., ονομα (*onoma*), name, and καλεω (*kaleō*), I call. A collection of terms peculiar to a science or art.

NONAGES'IMAL, Ast., Lat., *nonagesimus*, the ninetieth. The ninetieth degree of the ecliptic, used in calculating the parallaxes of the Moon.

NON-NAT'URALS, Phys. A term employed by the older physiologists to matters necessary to life, but form no organ of the living body, such as food, air, sleep. *Obsolete.*

NOTACAN'THOUS, Ent., Gr., νωτος (*notos*), the back, and ακανθα (*akantha*), a spine. A term applied to dipterous (or other) Insects, in which the thorax is armed with spines.

NOTONECT'AL, Ent., Gr., νωτος (*notōs*), back, and νηκτος (*nektos*), that swims. Applied to certain aquatic Insects that habitually swim on their back.

NOTONEC'TIDES, Ent., Gr., νωτος (*nōtos*), the back, and νηχω (*nechō*), I swim. A Family of hemipterous Insects so called, of which the *Notonecta* is the type.

NU'CHÆ, Anat., Lat., *nucula*, Fr., *nuque*, the nape of the neck. Of the nape of the neck.

NUDIBRANCHIA'TA, Mal., Lat., *nudus*, bare, and *branchiæ*, gills. The second Order of the gasteropodous Mollusca, so called because their gills are not covered, but exposed on the back.

NULLIP'ORA, Rad., Lat., *nullus*, no, *porus*, pore. A Family of coralliferous Polypi that present no pores on the surface.

NUM'MULITES, Mal., Lat., *nummus*, a coin or medal, and Gr., λιθος (*lithos*), a stone. A genus of fossil cephalopodous Mollusca of a thin lenticular shape, very abundant in certain chalk formations.

NUT, Bot., Sax., hnuꞇ. A one-celled, one-seeded, indehiscent fruit, all the other ovules and cells of the ovary having disappeared during its growth.

NUTA'TION, Ast., Lat., *nutare*, to shake, or vibrate. The nutation of the Earth's axis is a kind of vibratory motion, by which its inclination to the plane of the ecliptic is subjected to a slight variation.

NYCTAGINA'CEÆ, Bot., Gr., νυξ (*nux*), night, and αγειν (*agein*), to attract or charm. A natural Order of Plants. It includes the *Four-o'clock*, &c.

NYMPH, Ent., Gr., νυμφη (*numphe*), a bride. The second stage of the existence of Insects, or that in which they pass into a chrysalis, whence they emerge like a bride arrayed in her best attire.

NYMPHÆA'CEÆ, Bot., Gr., Νυμφη (*Numphe*), a Nymph, or Goddess of the streams. A natural Order of Plants, so called because all the genera inhabit the water. Here we have the yellow *Pond-Lily*, white *Water-Lily*. The sacred *Lotus* of the Egyptians is one of them.

OBCON'IC, Mal., Lat., *ob*, (frequently implying) inversely, and Gr., κωνος (*kōnos*), a cone. Inversely conic.

OBCOR'DATE, Mal., Lat., *ob*, inversely, and *cor*, the heart. Inversely heart-shaped.

OBSID'IAN, Min., from *Obsidius*, who first discovered it in Ethiopia. A volcanic, glassy lava, used by the ancient Mexicans for heads of lances, &c.

OB'SOLETE, Mal., Lat., *obsoletus*, faded. Indistinct, not well defined.

OBTURA'TOR, Anat., Lat., *obturare*, to close, or stop an entrance. This term is applied to a ligament, an artery, a vein, nerves, a muscle, and a foramen.

OCCIP'ITAL, Anat., Lat., *ob*, and *caput*, the head. Relating to the posterior part of the Cranium or occipital bone, as *occipital foramina*, &c.

OCCIP'ITO, Anat., Lat., see *Occipital*. A word frequently employed as part of compound terms, used to designate organs connected with the occiput, such as *Occipito-frontalis*, &c.

OC'CIPUT, Anat., Lat., see *Occipital*. The os occipitis or occiput is a trapezoidal bone that forms the posterior and inferior part of the walls of the cranium.

OCCLU'SION, Nat. Hist., Lat., *occludere*, to shut up. A term applied to the Chick in the shell, to the Nymph in the chrysalis, &c. &c.

OCCULTA'TION, Ast., Lat., *occultare*, to hide or cover. The obscuration of a fixed Star or Planet by the Moon.

OCEL'LATED, Mal., Lat., *ocellatus*, furnished with little eyes. Marked with numerous eye-like spots.

OCEL'LI, Ent. Lat., *ocellus*, a little eye. The *simple* eyes of Insects, so called to distinguish them from those that are *compound*.

OC'TAGON, Geom., Gr., οκτω (*oktō*), eight, and γωνια (*gōnia*), angle. A geometrical figure presenting eight angles and eight sides.

OCTAG'ONAL, Geom., see *Octagon*. Relating to an Octagon.

OCTAHE'DRON, Geom., Gr., οκτω (*oktō*), eight, and ἑδρα (*hedra*), face, or side. A regular solid having eight equal faces forming equilateral triangles.

OCTAN'DRIA, Bot., Gr., οκτω (*oktō*), eight, and ανηρ (*aner*), a male. The eighth Class of Plants, according to Linnæus, so called because the flowers have eight equal stamens.

OCTAN'DROUS, Bot., see *Octandria*. Having eight stamens.

OC'TANT, Ast. Gr., οκτω (*oktō*), eight. An astronomical instrument, graduated to the eighth of a circle, or 45°.

OCTOGYN'IA, Bot., Gr., οκτω (*oktō*), eight, and γυνη, female. The eighth Order of the first thirteen Classes of the Linnæan system of Plants, including all that have eight Styles.

ODOM'ETER, Nat. Ph., Gr., ὁδος (*hodos*), way, and μετρον (*metron*), measure. A sort of count-step. An instrument for measuring the distance travelled either in a carriage or on foot.

ODONTOG'ENY, Anat., Gr., οδους (*odous*), a tooth, and γενεσις (*genesis*), generation. The mode in which the teeth are formed and developed.

ODON'TOID, Anat., Gr., οδους (*odous*), a tooth, and ειδος (*eidos*), shape. A term applied to a tooth-like process (*processus dentatus*) of the *Dentata*, the second cervical vertebra.

ŒDEM'EROUS, Ent., Gr., οιδεω (*oideō*), inflated, or swollen, and μηρος (*meros*), thigh. A term applied to a group of coleopterous Insects, with enlarged and arcuate thighs.

ŒNOTHION'IC, Chem., Gr., οινος (*oinos*), wine, and θειον (*theion*), sulphur. An acid formed during the action of sulphuric acid upon alcohol.

ŒSOPH'AGUS, Anat., Gr., οισοφαγος (*oisophagos*), from οιω (*oiō*), to carry, and φαγω (*phagō*), to eat; that is, a food-carrier. The third of the three parts forming the superior portion of the alimentary canal. It is bounded superiorly by the pharynx, and inferiorly by the stomach.

ŒSOPHA'GEAL, Anat., see *Œsophagus*. Relating to the Œsophagus, as œsophageal muscles, arteries, &c.

OID, Gr., ειδος (*eidos*), form, resemblance, &c. A common termination to English scientific words, derived both from the Greek and Latin, implying a resemblance to the body indicated by the prefix. Thus *petaloid* signifies resembling a petal.

OIL, Chem., Lat., *oleum*, from the Gr., ελαιον (*elaion*), oil of Olives. Oils are either *fixed* or *volatile*, the latter being also called essential.

OLEA'CEÆ, Bot., Lat., *Olea*, the Olive. The one hundred and fifth Order of Plants. It contains the *Olive*, *Ash*, *Lilac*, &c.

OLEC'RANON, Anat., Gr., ωλενη (*ōlene*), elbow, and κρανον (*kranon*), head, as if the head of the elbow. A process of the ulna which gives insertion to the triceps extensor cubiti, (a muscle,) and serves to check the extension of the fore-arm.

OLE'FIANT, Chem., Lat., *oleum*, oil, and *fio*, I make. A gas obtained by heating two parts of sulphuric acid with one of alcohol. It obtains its name from the fact that, if one volume of it be combined with two volumes of chlorine, and be left standing over water, it soon condenses into a liquid resembling oil.

O'LEIC, Chem., see *Elain*. An acid resulting from the action of alkalies on olein.

O'LEIN, Chem., see *Elain*.

OLFAC'TION, Phys., Lat., *olfactus*, the smell. The sense of Smell, or the appreciation by the brain of the impression of odorous molecules on the olfactory nerves.

OLFAC'TORY, Anat., see *Olfactus*. Relating to Olfaction, as olfactory nerves, &c.

OLIGOPH'YLLOUS, Bot., Gr., ολιγος (*oligos*), few, and φυλλον (*phullon*), leaf. Having but few leaves.

OLIVA'RIA, Anat., see *Corpus*.

OL'IVINE, Min., Lat., *Oliva*, the Olive, from its green colour. A variety of Chrysolite.

OMA'SUM, Anat., Lat., *omasus*, the manyplies. The third of the four stomachs of the Ruminantia.

OMBROM'ETER, Nat. Ph., Gr., ομβρος (*ombros*), rain, and μετρον (*metron*), measure. A Rain-gauge.

OMEN'TUM, Anat., Lat., *omentum*, a membrane, from *omen*, because it was one of the principal parts of the viscera, from which the soothsayers drew their auguries. A duplicature of the Peritoneum that hangs below the stomach and in front of the intestines.

OMNIV'OROUS, Zool., Lat., *omnis*, all, every thing, and *voro*, I eat. Animals that are not restricted to any one sort of food. *Man*, for instance, is omnivorous, and as evidently intended to be so, as the *Cats* to be carnivorous.

ONAGRA'CEÆ, Bot., Gr., οναγρα (*onagra*), a Plant so called, because the wild Ass of the ancient writers, οναγρος, was said to be very fond of it. The fifty-fourth Order of Plants. It contains many showy genera.

ONTOL'OGY, Nat. Hist., Gr., οντος (*ontos*), of a being, and λογος (*logos*), a treatise. Another term for Nat. Hist., or that science which treats of all beings.

O'OLITE, Geol., Gr., ωον (*ōon*), egg, and λιθος (*lithos*), stone, as if, Egg-stone. A marine formation lying immediately beneath the fresh-water group of rocks, or, in its absence, beneath the cretaceous formation. It has received the name from the appearance of the limestone, which resembles an agglomerated mass of egg-like grains, resembling the roe of a fish.

OPAÇ'ITY, Opt., Lat., *opacus*, dark. A quality of bodies which renders them opaque, or incapable of transmitting light.

OPER'CULUM, Icth., Mal., Bot., Lat., *operculum*, a lid, or cover. The Gill-cover or branchial valve of Fishes. In the Mollusca, a solid body attached to the animal which, when the latter is drawn into its shell, closes the aperture. Opercula are usually found in univalves. In Plants, a lid so called closes the orifice of the *theca*, as in the Mosses.

OPHID'IA, Herp., Gr., οφις (*ophis*), a serpent. The third Order of Reptiles. It includes, of course, all Serpents or reptiles without feet.

OPHIOL'OGY, Herp., Gr., οφις (*ophis*), a serpent, and λογος (*logos*), a treatise. That branch of Herpetology which treats of serpents.

OPHIOPH'AGI, Zool., Gr., οφις (*ophis*), a serpent, and φαγω (*phagō*), I eat. Snake-eaters. A term applied to certain Birds, and even to Man himself, for Pliny so calls certain nations of Ethiopia that, as the tale ran, lived on serpents.

O'PHITE, Min., Gr., οφιτες (*ophites*), from οφις (*ophis*), a serpent. Serpentine. So called because the rock was said to present the colours of a serpent.

OPHTHAL'MIC, Anat., Gr., οφθαλμος (*ophthalmos*), the eye. Relating to the Eye. Thus we have ophthalmic nerves, ganglia, arteries, veins, &c.

OPSIG'ONAL, Anat., Nat. Hist., Gr., οψε (*opse*), late, and γινομαι (*ginomai*), being produced. That which is produced at a late period. The last of the molars are opsigonal teeth.

OPSIOM'ETER, Opt., Gr., οψις (*opsis*), sight, and μετρον (*metron*), measure. An instrument invented by Lehot for the purpose of measuring the extent of vision in different individuals, in order to determine the focal length of lenses for their spectacles, &c.

OP'TIC, Anat., Gr., οπτομαι (*optomai*), to see. Relating to Sight. Thus its special organ is called the *Optic nerve*, which reaches the eye through the *optic foramen*, &c.

OP'TICS, Nat. Ph., see *Optic*. That branch of Nat. Ph. which investigates the nature and laws of light.

ORBIC'ULAR, Anat., &c., Lat., *orbis*, a circle, any thing rounded. A term applied to a Bone and various Muscles. Also to forms of Shells, &c.

ORBICULA'RE, OS, Anat., see *Orbicular*. The *Os Orbiculare*, or orbicular bone, is the smallest in the human body, being not larger than a grain of Millet or a Canary seed. It lies between (and is articulated with) the *incus* and *stapes* of the tympanum.

OR'BIT, Ast., &c., Lat., *orbis*, a circle. In Astronomy, the path described by any celestial body by its own motion. In Anatomy, the cavity for the reception of the eye-ball. In Ornithology, the skin immediately round the eye.

OR'BITAR, Anat., see *Orbit*. Relating to the Orbit. Thus we say *orbitar processes*, *orbitar foramina*, *orbitar nerve*, &c.

ORCHES'TICS, Hyg., Gr., ορχηστικη (*orchestike*), from ορχεισθαι (*orcheisthai*), to dance. One of the three principal exercises of the ancient gymnasium, and a no less useful one at present, as it combines active exercise with amusement. To render dancing still more valuable, it should be performed in the open air.

ORCHIDA'CEÆ, Bot., Gr., Ορχις (*Orchis*), Ragwort. A natural Order of Plants. The genera are cultivated for their beauty or fragrance; among them are the *Vanilla*, *Cypripedium*, &c.

OR'DERS, Nat. Hist., Lat., *ordo*, arrangement. The first subdivision of a Class.

ORES, Min., Sax., oꞃe. Mineral bodies from which metals are extracted.

OR'GAN, Anat., &c., οργανον (*organon*), an instrument. A portion, complete in itself, of an organic body, which is made up of bundles of organs, simple and compound. Thus the eye, a muscle, nerve, vessel, ligament, &c., are all organs or instruments.

ORGAN'IC, Nat. Hist., see *Organ*. Relating to Organs. Animals and plants are organic bodies ; so called because they are composed of organs, each of which has a particular function.

ORGANIZA'TION, Phys., see *Organ*. The structure of the whole of an organic body, as the organization of a bird, or of a part, or the organization of the eye of a bird.

ORGANOG'RAPHY, Nat. Hist., Gr., οργανον (*organon*), an organ, and γραφη (*graphe*), a description. A term that should be substituted for Anatomy, as usually employed, Anatomy being only the means of revealing the organography. It is applied to animals and plants.

ORISMOL'OGY, Nat. Hist., Gr., ορισμος (*orismos*), fixing terms. Synonymous with Nomenclature and Terminology.

ORNITHIC'NITES, Geol., Gr., ορνις (*ornis*), a bird, and ιχνος (*ichnos*), a trace. A term applied by Palæontologists to the foot-marks of Birds which are found in various strata, and which prove the softness of the rock at the time they were impressed, and the existence of Birds at very remote periods.

ORNITH'OLITES, Orn., Gr., ορνις (*ornis*), a bird, and λιθος (*lithos*), stone. Fossil birds.

ORNITHOL'OGY, Nat. Hist., Gr., ορνις (*ornis*), a bird, and λογος (*logos*), a treatise. That branch of Zoology which treats of Birds.

ORNITHORYN'CHUS, Mam., Gr., ορνις (*ornis*), bird, and ρυγχος (*rugchos*), bill. Bird-billed. A name applied to a singular quadruped of N. Holland, which has the bill and head of a duck, and body of an otter.

OROBANCHA'CEÆ, Bot., Gr., οροβος (*orobos*), plant, and αγχω (*agchō*), to strangle or suffocate. The Orobanche received this name because, being parasitic, it was supposed it suffocated or destroyed other plants. A natural Order of Plants.

OROL'OGY, Geol., Gr., ορος (*oros*), a mountain, and λογος (*logos*), a treatise. That branch of Geology which treats of the structure, &c., of Mountains.

ORTHO'CERITE, Mal., Gr., ορθος (*orthos*), straight, and κερας (*keras*), horn. A fossil Univalve, straight, smooth, and resembling a horn.

ORTHOP'TERA, Ent., Gr., ορθος (*orthos*), straight, and πτερον (*pteron*), wing. The sixth Order of Insects, so called because their membranous wings, when at rest, are folded longitudinally, or in a straight line.

ORTHOTRO'POUS, Bot., ορθος (*orthos*), straight, and τρεπω (*trepō*), to turn. A term applied to the position of the Ovule, because it is not turned from its original direction.

ORYCTERO'PUS, Mam., Gr., ορυσσω (*orussō*), I dig, and πους (*pous*), foot. The only species known of an Animal so called from its feet and claws being well adapted for digging, found at the Cape of Good Hope.

ORYCTOG'RAPHY, Geol., Gr., ορυκτος (*oruktos*), buried or fossil, and γραφω (*graphō*), I write. A description of Fossils. Synonymous with *Oryctology*.

OS, Anat., Lat., *os*, from Gr., οστεον (*osteon*), a bone. This word, or its plural *ossa*, is, of course, applied with a specific addition to every bone in the skeleton. Bone is cartilage hardened with earthy matters, chiefly phosphate of lime. See *Skeleton*.

OSCULA'TION, Geom., Lat., *osculare*, to embrace. Applied to curves in contact in such a manner that the number of points common to both is the greatest possible.

OS'MAZOME, Chem., Gr., οσμη (*osme*), smell, and ζωμος (*zōmos*), soup. A sort of extract found in the muscles and blood of animals, which, according to Thenard, who named it, gives the peculiar flavour to soups, &c.

OSMERIN'EA, Min., Gr., οσμηρος (*osmeros*), odorous. The fourth Order of the second Class of Minerals, so called because, when moistened, these minerals give out an argillaceous odour.

OS'MIUM, Chem., Gr., οσμος (*osmos*), odour. A Metal obtained from platinum. It is white, less brilliant than platinum, and easily pulverized Specific gravity about 10

OSSIFICA'TION, Phys., Lat., *os*, bone, and *facere*, to make or form. That process by which cartilage becomes infiltrated with earthy matter, and is thus rendered sufficiently rigid to form the levers called bones.

OSTEOL'OGY, Zool., Lat., *os*, bone, and Gr., λογος (*logos*), a treatise. That branch of Organography which treats of the Bones.

OS'TIUM, Anat., Lat., *ostium*, door, a gate. A term applied to a circular opening that establishes a communication between the auricle and ventricle of the heart, one on each side, and closed, when necessary, by valves. The one in the anterior or venous heart, is called *Ostium venosum;* the other, the *O. arteriosum.*

OSTRAC'ODA, Crust., Gr., οστρακον (*ostrakon*), a shell, and ειδος (*eidos*), form. A Family of Entomostraca, so called because their tegument is folded in two, like the shell of a testaceous bivalve.

OTACOUS'TIC, Ac., Gr., ους (*ous*), the ear, and ακυω (*akuo*), I listen. Applied to all sorts of Instruments which increase the power of hearing, such as Ear-trumpets.

OTA'RIA, Mam., Gr., ους (*ous*), the ear. A section of Seals, so called, because the species are furnished with external and projecting ears.

O'VAL, Anat., &c., Lat., *ovum*, an egg. Shaped like an egg. A term applied by Anatomists to various fossa and foramina.

OVA'RIUM, Anat., Lat., *ovum*, an egg. An organ in which the ova or eggs of Animals are formed.

O'VARY, Anat., see *Ovarium.*

O'VIDUCT, Zool., Lat., *ovum*, an egg, and *ductus*, a conduit, or duct. The duct through which the eggs are extruded from the ovary.

O'VINE, Mam., Lat., *ovis*, a sheep. A term applied to the various species of Sheep, taken collectively.

OVIP'AROUS, Zool., Lat., *ovum*, an egg, and *parere*, to produce. Reproduction by eggs that are subsequently hatched.

OVIPOS'ITOR, Ent., Lat., *ovum*, an egg, and *ponere*, to place or deposit. A curious and complicated organ possessed by many Insects, by which they are enabled to bore into the interior of plants and animals, and deposit their eggs there. The *Ichneumons* furnish a good example.

OVO-VIVIP'AROUS, Herp., Lat., *ovum*, an egg, *vivus*, living, and *parere*, to produce. A term applied to that mode of reproduction, in which, although eggs are formed, and in the oviduct, they are hatched prior to extrusion, and consequently the young are brought forth alive. The *Viper*, (a contraction of viviparous,) and some other venomous genera of Ophidians, afford an example.

O'VULES, Bot., Lat., *ovum*, an egg. Bodies so called, from their analogy to the ova or eggs of animals, that are contained in the ovary of Plants, and are the rudiments of the seeds.

OX'ALATES, Chem., Gr., Οξαλις (*Oxalis*), Sorrel. Compounds formed by oxalic acid with different bases.

OXAL'IC, Chem., Gr., Οξαλις (*Oxalis*), Sorrel. A violent and acrid poison, so called because it is found in Sorrel. It is frequently mistaken for Epsom salts, which it greatly resembles.

OXALIDA'CEÆ, Bot., Gr., Οξαλις (*Oxalis*), Wood Sorrel. A natural Order of Plants. The *Oxalis acetosella* is remarkable for the quantity of oxalic acid it contains.

OX'IDE, or **OX'YDE**, Chem., οξυς (*oxus*), acid, sour. A generic term applied to all simple bodies united with oxygen, but in too small quantity to convert them into acids.

OX'YGEN, Chem., Gr., οξυς (*oxus*), acid, and γενναω (*gennaō*), I produce. A name given to it by Lavoisier, very expressive of its property of forming acids by uniting with other elementary bodies. It is, perhaps, the most extensively distributed body in nature, forming one-fifth of the atmosphere, and entering into the composition of water and nearly of all bodies on the face of the earth, and of the crust of the earth itself.

OXYDA'TION, Chem., see *Oxide*. That act by which simple bodies and oxygen become united.

OXYO'PIA, Phys., Gr., οξυς (*oxus*), acute, and ωψ (*ōps*), the eye. Unusually acute vision.

PACHYDER'MATA, Mam., Gr., παχυς (*pachus*), thick, and δερμα (*derma*), skin. Thick-skinned. The seventh Order of the Mammalia. It includes the *Elephant*, *Hippopotamus*, &c.

PACHYDER'MATOUS, Mam., see *Pachydermata*. Thick-skinned.

PALÆOTHE'RIUM, Mam., Gr., παλαιος (*palaios*), ancient, and θηριον (*therion*), beast. A genus of extinct Pachydermata, somewhat approximating to the Tapirs.

PALÆONTOL'OGY, Geol., Gr., παλαιος (*palaios*), ancient, οντα (*onta*), beings, and λογος (*logos*), a treatise. That branch of Nat. Hist., which treats of Fossil Remains, vegetable and animal.

PALÆS'TRA, Hyg., Gr., παλη (*pale*), wrestling. A wrestling school or ground. A section of the Gymnasium which, from the excessive violence of the exercise it inevitably produces, as well as from certain other physiological (and moral) considerations, is omitted in modern Hygiene.

PAL'ATE, Anat., Lat., *palatus* (Gr., παω, to eat), palate of the mouth. The bony or hard palate is the superior arched portion of the mouth. The soft palate, a muscular curtain (velum palati) bounds it posteriorly.

PA'LEÆ, Bot., Lat., *palea*, straw or chaff. The Bracts of the separate flowers of a capitulum or head, as in the Sunflower.

PALEA'CEOUS, Bot., Lat., *palea*, straw. Chaffy.

PALLA'DIUM, Chem., Lat., *Palladium*, from the Gr., Παλλαδιον (*Palladion*), Pallas. A Metal discovered in the ore of platina, in 1803, by Wollaston, and thus named, either from the statue (Palladium) or Pallas. In external characters it closely resembles platinum.

PALLIOBRAN'CHIATE, Mal., Lat., *pallium*, a mantle, and *branchiæ*, gills. A term applied to an Order (*Palliobranchiata*) of acephalous Mollusca, because their branchiæ are placed on the internal surface of the lobes or lips of the Mantle, q. v.

PAL'MÆ, Bot., Lat., *Palma*, a Palm-tree. A natural Order of Plants. The plants of this order are among the most useful and ornamental of the vegetable world.

PAL'MATE, Bot., Lat., *palma*, the palm of the hand. A term applied to Roots with one or more rounded knobs or tubercles (not tubers) with branches below, spreading like fingers.

PAL'MIPED, Orn., Lat., *palma*, palm, and *pes*, foot. Web-footed.

PAL'MIPEDES, Orn., see *Palmiped*. The sixth and last Order of Birds, so called because their feet are formed by the intervention of the web, something like the palm of the hand. It includes all web-footed birds.

PALPATO'RES, Ent., Lat., *palpo*, I feel. A Family of clavicorn Coleoptera, so called because they are furnished with very long palpi.

PAL'PEBRÆ, Anat., Lat., *palpo*, I touch gently, or *palpitare*, to palpitate. The eye-lids.

PAL'PI, Ent., Lat., *palpo*, I touch. Articulated filaments, originating from the maxilla or lip of Insects. Their function seems to be that of enabling the animal to ascertain its proper food by the sense of touch.

PAL'PICORNS, Ent., *palpo*, I touch, and *cornu*, a horn. The fifth Family of coleopterous Insects, so called because their antennæ (horns) are not longer than the maxillary palpi, which they resemble. See *Palpi*.

PALUDI'NA, Mal., Lat., *palus*, a marsh. A genus of fresh-water testaceous Mollusca, so called from their inhabiting fresh-water marshes.

PALUS'TRINE, Nat. Hist., Lat., *palus*, a marsh. Inhabiting marshes.

PAN'CREAS, Anat., Gr., παν (*pan*), all, and κρεας (*kreas*), flesh. A name given by the ancients to the largest of the salivary glands. It is situated in the abdomen behind the stomach.

PANCREAT'IC, Anat., see *Pancreas*. Relating to the Pancreas.

PAN'DURATE, Bot., Lat., *pandura,* a sort of three-stringed violin, said to have been invented by Pan. Fiddle-shaped.

PAN'ICLE, Bot., Lat., *panicula,* a panicle. An irregularly branched raceme.

PANNIC'ULUS, Anat., a dimin., of Lat., *pannus* (Gr. πανος), a cloth. A term usually coupled with *carnosus,* and restricted to the most superficial muscle or muscles of the body; a web-like tissue, the fibres of which are inserted into the skin.

PAN'TAGON, Geom., Gr., παν (*pan*), all, and γωνια (*gōnia*), angle. A term given by Bernoulli to a sort of reciprocal trajectory, which, in each different position of its axis, always cuts itself at the same angle.

PANTOCHRONOM'ETER, Nat. Ph., Gr., παν (*pan*), all, χρονος (*chronos*), time, and μετρον (*metron*), measure. The name of a recently invented Instrument, which combines the compass, sun-dial, and universal time-dial.

PAPAVERA'CEÆ, Bot., Lat., *Papaver,* the Poppy. A natural Order of Plants. It contains the common *Poppy, Blood-Root* or *Sanguinaria,* &c.

PAPILIONA'CEOUS, Bot., Lat., *Papilio,* a Butterfly. A term applied to such Flowers as those of the Pea, because the irregular size and colour of their corolla bear a fancied resemblance to that Insect.

PAPIL'LA, Anat., Lat., *papilla,* a nipple, or any similar elevation. A term applied to little graniform bodies formed by nerves and vessels—*nervous papillæ,* &c. &c.

PAPILLO'SE, Bot., Lat., *papilla,* a pimple. Pimpled.

PA'RA, Chem., Gr., παρα (*para*), close to, by the side of. A prefix, as to tartaric acid and tartrates, implying proximity. Thus we have *parataric acid* and *paratartrates.*

PARAB'OLA, Geom., Gr., παραβαλλω (*paraballō*), to equal. One of the conic sections. A curved line formed by the section of a cone parallel to one of its sides.

PARAB'OLOID, Geom., Gr., see *Parabola,* and ειδος (*eidos*), form, or surface. A solid, of which the surface is terminated by a parabola—a *parabolic conoid.*

PARACEN'TRIC, Geom., &c., Gr., παρα (*para*), near, or beyond, and κεντρον (*kentron*), centre. A curved line along which a body descending by the force of gravity will approach to, or recede from, a centre, by equal distances in equal times. In Astronomy, the paracentric *motion* denotes the rate at which a planet approaches to, or recedes from, the centre of attraction in a given time.

PARACHU'TE, Nat. Ph., Fr., *parer*, to ward off, and *chûte*, fall. An Instrument resembling an enormous umbrella, intended to bring the aeronaut safely to the ground in case of accident to his balloon.

PAR'AFFIN, Chem., Lat., *parum*, but little, and *affinis*, participating. A peculiar hydrocarbon, crystalline, transparent and colourless, obtained by a tedious process from the distillation of wood. It received its name for its remarkable want of affinity to other bodies.

PAR'ALLAX, Ast., Gr., παραλλαξις (*parallaxis*), difference, from αλλαττω (*allattō*), I change. The difference between the true and apparent distance of a planet from the zenith of its true place.

PARALLEL'OGRAM, Geom., Gr., παραλληλος (*parallelos*), parallel, and γραμμη (*grammé*), line. A quadrangular figure of which the opposite sides are parallel.

PARALLELOPIP'EDON, Geom., Gr., παραλληλος (*parallelos*), parallel, επι (*epi*), upon, and πεδιον (*pedion*), a plane. A solid bounded by six rectangular plane faces, every opposite two of which are equal and parallel.

PARAM'ETER, Geom., Gr., παρα (*para*), by the side, and μετρον (*metron*), measure. A constant and invariable line that enters into the equation of a curve; so called because it is an invariable measure for the comparison of the ordinates and abscissi of diameters in curves.

PARANATEL'LON, Ast., Gr., παρανατελλων (*paranatellōn*), appearing near. A term applied to a Star which rises opposite to or beside a sign of the Zodiac.

PARASI'TA, Ent., Gr., παρα (*para*), near, and σιτος (*sitos*), corn. The word parasite is thus derived, and is applied, by analogy, to Insects forming the third Order of the Class, and thus significantly named. It includes the various species of Pediculus or Louse.

PAREN'CHYMA, Anat., Bot., Gr., παρεγχυω (*paregchuō*), to diffuse. In Anatomy, a tissue composed of globules united with cellular substance, soft and easily torn. In Botany, the common cellular tissue, consisting of the pith, leaves, and all the pulpy and succulent parts of plants.

PARENCHYMA'TA, Rad., Gr., παρεγχυμα (*paregchuma*), parenchyma. The second Order of the Entozoa, or intestinal worms; so called because the body of the species which compose it is filled with a continuous parenchyma.

PARENCHYM'ATOUS, Anat., Bot., see *Parenchyma*. Of the nature of parenchyma.

PARHE'LION, Ast., Gr., παρα (*para*), near, and Ἡλιος (*Helios*), the Sun. A mock Sun. A meteoric appearance by the side of the Sun.

PARI'ETAL, Anat., Lat., *paries*, a wall. The parietal Bones are two quadrilateral bones forming the superior, middle, and lateral portions of the walls of the Cranium.

PARI'ETES, Anat., Lat., *paries*, a wall. A term frequently used to the limits of the cavities of the body, as the parietes (or walls) of the Abdomen.

PAROT'ID, Anat., Gr., παρα (*para*), near, and ους (*ous*), the ear. A large salivary Gland situated near the angle of the lower jaw and before the ear.

PARSE'LION, Ast., Gr., παρα (*para*), near, and Σεληνη (*Selene*), the Moon. A luminous circle which sometimes surrounds the Moon, in which one or more images of that planet may be seen.

PASSERI'NÆ, Orn., Lat., *Passer*, a Sparrow. The second Order of Birds, characterized by purely negative marks, and containing all those which are neither rapacious, climbing, wading, gallinaceous, nor web-footed.

PAS'SERINE, Orn., same etym. One of the Passerinæ.

PASSIFLORA'CEÆ, Bot., Lat., *passio*, passion or martyrdom, and *flos*, flower. A name given to the genus *Passiflora*, or Passion-Flower. A natural Order of Plants.

PATEL'LA, Anat., Lat., *patella*, a little dish. The Knee-pan. A short, thick, rounded bone situated at the knee, and formed, like a sesamoid, in the tendon of muscles.

PAVIL'ION, Anat., Fr., *pavillon*. The whole of the projecting portion of the external Ear.

PEC'TEN, Orn., Lat., *pecten*, a comb. A vascular membrane folded in parallel plaits, resembling the teeth of a comb, that is found in the eye of Birds. It extends from the retina through the vitreous humour to the crystalline lens. As it resembles a compressed conical sac, it has also been called the *Marsupium*.

PEC'TIN, Chem., Gr., πηκτος (*pektos*), coagulated. A principle so called, which forms the basis of vegetable *jelly*, whence its name.

PEC'TINATE, Bot., Lat., *pecten*, a comb. Pinnately parted Leaves, with very close and narrow divisions, like the teeth of a comb.

PECTINA'TI, Anat., Lat., *pecten*, a comb. Muscular fasciculi found in the right auricle of the heart; so called from their arrangement resembling that of the teeth of a comb—*Musculi pectinati*.

PECTINIBRANCHIA'TA, Mal., Lat., *pecten*, a comb, and *branchiæ*, gills. The sixth Order of gasteropodous Mollusca; so called because their gills, or branchiæ, are divided into narrow slips which lie side by side like the teeth of a comb.

PEC'TORAL, Anat., Lat., *pectus*, the breast. Relating to the Breast; thus we have the Pectoral muscles, &c.

PEC'TORALS, Icth., Lat., *pectus*, the breast. Those fins in Fishes which correspond in position to the anterior extremities of quadrupeds.

PEC'TUS, Ent., Lat., *pectus*, breast. The inferior surface of the thorax of an Insect.

PED'ATE, Bot., Lat., *pes*, a foot. Leaves so called from their fancied resemblance to a bird's foot.

PED'ICEL, Bot., Lat., *pedicellus*, a little stalk. Each of the separate stalks of a peduncle.

PEDIPAL'PI, Ent., Lat., *pes*, foot, and *palpi*, feelers. A Tribe of pulmonary Arachnids, so called because their palpi (q. v.) are terminated by a bidactyle claw. The Scorpion affords a good example.

PEDUN'CLE, Bot., Lat., *pedunculus*, a stalk. The main Stalk of the pedicels.

PELAG'IC, Mal., Gr., πελαγος (*pelagos*), the sea. Belonging to the *deep* sea, not littoral.

PEL'ECOID, Geom., Gr., πελεκυς (*pelekus*), a hatchet, or axe, and ειδος (*eidos*), shape. Form of a figure—axe-shaped.

PELICANI'DÆ, Orn., Gr., Πελεκαν (*Pelekan*), from πελεκυς (*pelekus*), a hatchet, because the bill is flat, &c. A Family of Birds of which the Pelican is the type.

PEL'TATE, Bot., Gr., πελτη (*pelte*), a shield. Shield-shaped.

PEL'VIC, Anat., see *Pelvis*. Relating to the Pelvis, as pelvic viscera, &c.

PEL'VIS, Anat., Lat., *pelvis*, a basin. The inferior portion of the Abdomen, or all the cavity below a line drawn from the spine of the right ilium to that of the left. The same name is also given to the cavity of the kidney. Penann'ar

PEN'DULUM, Nat. Ph., Lat., *pendulus*, pendent, suspended. P, A heavy body suspended from a fixed point, which, when deflected from its vertical position, acquires a circular motion. It is used for measuring time.

PENICIL'LATE, Zool., Lat., *penicillum*, a pencil. Said of a part which supports one or several pencils of hairs.

PENNATULA'RIÆ, Rad., Lat., *penna*, a feather. A Family of Polypi, so called from their feather-like form. The chocolate-coloured species called the *Sea-pen*, and so common in the stores, is a good specimen of the group.

PEN'NIFORM, Anat., Lat., *penna*, a feather, and *forma*, shape. A term applied to Muscles which have a middle tendon into which the fibres are inserted at an angle on either side, like the laminæ of a feather into the stem.

PENTAC'RINITES, Rad., Gr., πεντε (*pente*), five, and χρινον (*chrinon*), a lily. A Tribe of echinodermatous Radiata, most of which are extinct or fossil; so called because, in addition to the fancied resemblance they have in common with all *Encrinites* to a lily, the body is composed of *five* pieces articulated with the stem.

PEN'TAGON, Geom., Gr., πεντε (*pente*), five, and γωνια (*gōnia*), angle. A solid with five faces and five angles.

PENTAG'YNOUS, Bot., Gr., πεντε (*pente*), five, and γυνη (*gune*), female. Flowers furnished with five pistils.

PENTAHÆ'DRON, Geom., Gr., πεντε (*pente*), five, and ἑδρα (*hedra*), face or side. A solid terminated by five faces.

PENTAM'ERA, Ent., Gr., πεντε (*pente*), five, and μερις (*meris*), a portion. The first of the four Sections into which the Coleoptera are divided; so called because the tarsus consists of five pieces or articulations in all the Insects which compose it.

PENTAM'EROUS, Ent., Bot., Gr., πεντε (*pente*), five, and μερις (*meris*), a part. Insects forming the first of the four sections into which the Coleoptera are divided; so called because, in all, the tarsi consist of five joints. In Botany, Flowers of which the whorl consists of five parts.

PENTAN'DROUS, Bot., Gr., πεντε (*pente*), five, and ανηρ (*aner*), male. Flowers furnished with five Stamens.

PENTEDEC'AGON, Geom., Gr., πεντε (*pente*), five, δεκα (*deka*), ten, and γωνια (*gōnia*), angle. A solid presenting fifteen angles and as many sides.

PENAM'ORA, Ast., Lat., *pene*, almost, and *umbra*, a shadow. A faint or imperfect shadow which surrounds the perfect one during an eclipse. See p. 175

PEPERI'NO, Geol., It., *pepe*, pepper. A term applied by the Italian Geologists to *basaltic* tuffs, to distinguish them from their *tufa* or *tuff*, which consist of felspath.

PE'PO, Bot., Gr., Πεπον (*Pepon*), a Melon. An indehiscent, fleshy fruit, invested by the calyx, and with a firm rind, such as the melon, cucumber, &c.

PEP'SIN, Chem., Gr., πεψις (*pepsis*), coction. A peculiar principle secreted by the stomach and found in the gastric juice.

PER, Chem., Lat., *per*, here signifies intensity, much. A prefix implying the presence of the greatest quantity of oxygen.

PERCOI'DÆ, Icth., Lat., *Perca*, the Perch. A tribe of acanthopterygious Fishes, of which the Perch is the type.

PEREDIO'LA, Bot., Gr., περιδεω (*perideō*), I bind round. The immediate or investing membrane of the sporules of the Algæ.

PEREN'NIAL, Bot., Lat., *perennis*, perpetual. Plants which wither and die down to the root every year, but which are reproduced for an indefinite period by buds from that root.

PERENNIBRANCH'IATE, Herp., Lat., *perennis*, perennial, and *branchiæ*, gills. A term applied to those batrachian Reptiles, such as the *Menobranchus*, q. v., which, although furnished with lungs, retain their branchiæ for life. A defective term for which *Menobranchiate* should be substituted.

PERFO'LIATE, Bot., Lat., *per*, by the side, or edge, and *folium*, leaf. A term applied to Leaves which become united or ingrafted with each other. Specimens may always be found on the *Honeysuckles*.

PERGAME'NEOUS, Nat. Hist., Lat., *pergamenus*, of parchment. Applied to any part which is tough, thin, semi-transparent, and resembles parchment.

PER'IANTH, Bot., Gr., περι (*peri*), around, and ανθος (*anthos*), a flower. A term applied to the floral envelopes of certain Plants, in which neither the calyx nor corolla are very evident.

PERICAR'DIUM, Anat., Gr., περι (*peri*), about, and καρδια (*kardia*), the heart. A membranous and somewhat triangular sac in which the heart is suspended.

PER'ICARP, Bot., Gr., περι (*peri*), around, and καρπος (*karpos*), fruit, or seed. The fructified Ovary—the seed-vessel, which, with the seeds it incloses, form what we call the fruit.

PERICHÆ'TIAL, Bot., Gr., περι, about, and χαιτη (*chaite*), a bristle. A term applied to those Leaves of Mosses which are inserted at the base of the setæ, or bristles.

PERICHON'DRIUM, Anat., Gr., περι (*peri*), about, and χονδρος (*chondros*), cartilage. The Periosteum, so called when it covers a cartilage, as it does the costal cartilages.

PER'IGEE, Ast., Gr., περι (*peri*), near, and Γη (*Ge*), the Earth. The point of a planet's orbit nearest the Earth.

PERIGO'NIUM, Bot., Gr., περι (*peri*), about, and γινομαι (*ginomai*), to be produced. See *Perianth* or *Perianthium*, of which it is a synonyme.

PERIGYN'IUM, Bot., Gr., περι (*peri*), around, and γυνη (*gune*), a female. A sort of sac which, in certain plants, (Cyperaceæ) encloses the ovary.

PERIG'YNOUS, Bot., see *Peryginium*. Plants in which the calyx, corolla, and stamens are inserted *round* the ovary.

PERIHE'LION, Ast., Gr., περι (*peri*), near, and ʽΗλιος (*Helios*), the Sun. The point in a planet's orbit in which it is nearest to the Sun.

PERINÆ'UM, Anat., Gr., περιναιος (*perinaios*), the perinæum. The space included between the tuberosities of the Ischia; hence perinæal, as applied to parts in the vicinity, as *perinæal artery*, &c.

PERIOS'TRACUM, Mal., Gr., περι (*peri*), about, and οστρακον (*ostrakon*), a shell. The membranous tegument of the shell of the Mollusca. It is the exact analogue of the cuticle in other animals.

PERIPOL'YGON, Min., Gr., περι (*peri*), about, and πολυγωνον (*polugōnon*), a polygon. A Prism with very numerous faces, so called by Haüy.

PERISTAL'TIC, Phys., Gr., περι (*peri*), against, and στελλω (*stellō*), to contract. A term expressive of the continued vermicular or contractile motion of the alimentary canal, by which its contents are forced through it.

PER'ISTOME, Bot., Gr., περι (*peri*), round, and στομα (*stoma*), mouth. A range or two of cellular bristles united by two, or formed into a membrane, placed in the aperture or mouth of the *theca*, of mosses.

PERITONE'UM, Anat., Gr., περι (*peri*), around, and τεινω (*teinō*), I sketch. The lining membrane of the Abdomen, a serous tissue in the form of a very irregular sac, which not only lines the cavity, but gives a coat to most of its viscera, furnishes their ligaments, &c.

PERIOS'TEUM, Anat., Gr., περι (*peri*), about, and οστεον (*osteon*), bone. A firm, white, fibrous, and resisting membrane that invests the bones.

PERIPH'ERY, Geom., Gr., περι (*peri*), around, and φερω (*pherō*), I carry. The circumference of a figure.

PERONÆ'US, Anat., Gr., περονη (*perone*), a clasp. Another name for the *Fibula*, q. v. Hence comes *peronæal*, applied to muscles, &c.

PEROX'IDE, Chem., Lat., *per*, indicative of intensity, and Gr., οξυς (*oxus*), acid. A prefix to bases implying that they contain the largest proportion of oxygen with which the base can unite.

PERSIST'ENCE, Opt., Lat., *per*, through, and *sisto*, I stop, or arrest. The duration of the impression of luminous rays on the retina after the object from which they were reflected has disappeared.

PERSIST'ENT, Bot., Lat., *per*, through, and *sisto*, I stop. A term applied to Leaves, such as those of Evergreens, which are not deciduous, but remain through the winter and until the appearance of new leaves.

PERSPIRA'TION. See *Exhalation*.

PERTURBA'TION, Ast., Lat., *perturbatio*, disturbance. The aberration of any celestial body from the orbit it would describe if acted on by no other attraction than that of the Sun, or the centre round which it revolves.

PET'AL, Bot., Gr., πεταλον (*petalon*), leaf, from πεταω (*petaō*), to open, or blow. Each of the inner and coloured (not green) leaves of the floral envelope.

PETALOÇ'EROUS, Ent., Gr., πεταλον (*petalon*), a leaf, and κερας (*keras*), a horn. Applied to Insects in which the antennæ terminate in a foliaceous or leafy mass.

PET'ALOID, Bot., Gr., πεταλον (*petalon*), a petal, and ειδος (*eidos*), form. A term expressive of the delicate and petal-like appearance of the *calyx* of certain Plants.

PET'IOLE, Bot., Lat., *petiolus*, a little foot. A small footstalk—the footstalk of the leaf.

PET'IOLULE, Bot., see *Petiole*. The stalk of a leaflet.

PETRO'LEUM, Chem., Gr., πετρος (*petros*), rock, and ελαιον (*elaion*), oil. Mineral Tar, a solution of asphaltine in a peculiar oily fluid, called *Petrolene*.

PE'TROUS, Anat., Gr., πετρος (*petros*), a stone. A term applied to a portion of the Temporal Bone, on account of its hardness. It is the *Rocher* of the French anatomists, and contains all the organs of the ear except the pavilion.

PHÆNOG'AMOUS, for **PHÆNEROG'AMOUS**, Bot., Gr., φανερος (*phaneros*), open, manifest, and γαμος (*gamos*), nuptials. Applied to Plants in which the fructification is the reverse of Cryptogamous.

PHALÆ'NÆ, Ent., Gr., φαλαινα (*phalaina*), from φαω (*phaō*), to shine. A term applied to a large group of nocturnal Lepidoptera, or Moths; so called because they are attracted by the light of a candle.

PHAL'ÆNITES, Ent., see *Phalænæ*, of which it is a synonyme.

PHALAN'GES, Anat., Gr., φαλαγξ (*phalagx*), literally a row of soldiers. Applied, in Anatomy, to the Bones of the fingers and toes which are placed side by side, in rows, like a phalanx of armed men.

PHANTASMAGO'RIA, Opt., Gr., φαντασμα (*phantasma*), phantom, and αγορα (*agora*), an assemblage. Optical illusions produced in darkened places by well-known laws, representing spectres, &c.

PHAN'TOM, Phys., Gr., φαντασμα (*phantasma*)—from φαινω, I appear—a spectre. An imaginary product of irregular cerebral action.

PHARYN'GEAL, Anat., see *Pharynx*. Relating to the Pharynx.

PHAR'YNX, Anat., Gr., φαρυγξ (*pharugx*), the Pharynx. The superior and widened portion of the Æsophagus. It is directly behind the larynx.

PHASCOL'OMYS, Mam., Gr., φασκωλον (*phaskōlon*), a pouch, and Μυς (*Mus*), *Rat*. The fifth section of the Marsupialia, containing but this one genus. The ***Wombat*** is the only species known. From N. Holland.

PHA'SES, Ast., Gr., φασις (*phasis*), appearance. The different appearances presented by the planets as to form.

PHENOM'ENA, Nat. Ph., Gr., φαινομαι (*phainomai*), to appear. This word was formerly restricted in its application to any unusual appearance, but is now employed to express the constant results of the action and reaction of all bodies.

PHILOS'OPHY, Gr., φιλος (*philos*), friend, and σοφια (*sophia*), wisdom, the love of wisdom. The clear and distinct knowledge of things arising from that of their causes and effects. The science of Nature.

PHLORID'ZIN, Chem., Gr., φλοος (*phloos*), bark, and ῥιζα (*rhiza*), root. A substance found in the bark of the root of Apple, Pear, Cherry, and Plumb trees, crystallizing in silky prisms.

PHOLA'DÆ, Mal., Gr., φωλεος (*phōleos*), a hiding-place. A group of bivalve Mollusca, of which the *Pholas* is the type; so called from their hiding themselves in cavities, which they excavate in clay, and even in very hard rocks—frequently called *Pholades.*

PHONA'TION. See *Phonics.*

PHO'NICS, Ac., Gr., φωνη (*phōne*), voice or sound. Synonymous with Acoustics, but usually restricted to the sounds of the voice.

PHO'NOLITE, Min., Gr., φωνη (*phōne*), sound, and λιθος (*lithos*), stone. A compact Basalt that rings when struck.

PHOS'PHATES, Chem., Gr.. *Phosphorus*, q. v., and *ate*, a termination indicating a salt. Salts of phosphoric acid.

PHOS'PHITES, Chem., see *Phosphorus.* Salts containing phosphorous acid.

PHOS'PHORUS, Chem., Gr., φως (*phōs*), light, and φερω (*pherō*), to carry, literally light-carrier. An elementary, solid, diaphanous, flexible, and highly inflammable substance. It does not exist in a separate state, but in combination with other bodies. It was first obtained by Brand, in 1660.

PHOTOGEN'IC, Opt., Gr., φως (*phos*), light, and γιγνομαι (*gignomai*), to be born. A term applied to drawings produced, like those of Daguerre, by the action of light.

PHOTOGRAPH'IC, Chem., see *Photogenic.*

PHOTOM'ETER, Nat. Ph., Gr., φως (*phōs*), light, and μετρον (*metron*), measure. An instrument for determining the relative intensity of light.

PHRENOL'OGY, Gr., φρην (*phren*), the mind, and λογος (*logos*), a treatise. A theory based on the supposition of a multiplicity of organs in the cerebrum and cerebellum, each of which has a distinct function or faculty, on the relative development of which depends the force of the various intellectual powers, &c.

PHRYGA'NEA, Ent., Gr., φρυγανον (*phruganon*), a faggot The name of a group of neuropterous Insects; so called because their larvæ are enclosed in a tube resembling a bundle of dried twigs and leaves.

PHYCOM'ATER, Bot., Gr., φυκος (*phukos*), sea-weed, and μητηρ (*meter*), mother. A term applied to the gelatinous matter in which the sporules of the algaceous Plants first vegetate.

PHYLLO'DIUM, Bot., Gr., φυλλον (*phullon*), leaf, and ειδος (*eidos*), form. A term applied to the dilated Petiole of certain plants, which forms a sort of nerved leaf, always, however, presenting the edge or margin to the sky instead of the surface.

PHYLLOP'ODOUS, Crust., Gr., φυλλον (*phullon*), a leaf, and πους (*pous*), foot. Leaf-footed. A term applied to a Tribe of Crustacea (*Phyllopoda*), from their feet being flattened or leaf-like.

PHYLLOSTOM'ATA, Mam., Gr., φυλλον (*phullon*), a leaf, and στομα (*stoma*), mouth. A Family of Bats (the *true* Vampyres), so called from certain leaf-like appendages placed across the nose, not the mouth.

PHYSA'LIA, Rad., Gr., φυσα (*phusa*), a bubble. A group of hydrostatic and beautiful Acalephans, well known by its type, the *Portuguese Man-of-war.* They all possess the property of irritating the skin, like nettles.

PHYS'OGRADES, Rad., Gr., φυσιοω (*phusioō*), filled with air, and Lat., *gradior*, I advance. A Tribe of Acalephans that swim on the surface of the ocean by means of an air-vessel.

PHYS'ICS, Gr., φυσικη (*phusike*), from φυσις (*phusis*), nature. That science which investigates all bodies and the laws by which they are governed—the science of Nature.

PHYSIOL'OGY, Gr., φυσις (*phusis*), nature, and λογος (*logos*), a treatise. This word formerly signified the same as Physics, but is now restricted to that science which treats of the functions and phenomena of Animals and Plants.

PHYTOLACCA'CEÆ, Bot., Gr., φυτον (*phuton*), plant, and λαγχα (*lagcha*), lake-colour. A natural Order of Plants. It contains the common Poke, well known for the deep colour yielded by its fruits, which are berries.

PHYTOL'OGY, Bot., Gr., φυτον (*phuton*), a plant, and λογος (*logos*), a treatise. Botany.

PHYTOMORPH'OUS, Nat. Hist., Gr., φυτον (*phuton*), a plant, and μορφη (*morphe*), form. Plant-shaped. A term frequently applied to Corals.

PHYTOTYP'OLITE, Geol., Gr., φυτον (*phuton*), plant, τυπος (*tupos*), the impression, and λιθος (*lithos*), stone. A typolite, the impression on which is that of a plant, whether found in stone, coal, or other minerals.

PI'A-MATER, Anat., Lat., *pia*, tender, and *mater*, mother. The most internal of the three meninges of the Brain, and directly in contact with it. Bichat considers it a plexus of blood-vessels united by a delicate web of cellular substance.

PICROTOX'IN, Chem., Gr., πικρος (*pikros*), bitter, and τοξικον (*toxikon*), poison. A peculiar substance (vegeto-alkali) obtained by Boullay from the fruit of the Menispermum cocculus, and in which resides its poisonous qualities.

PIEZOM'ETER, Nat. Ph., Gr., πιεζω (*piezō*), I compress, and μετρον (*mĕtron*), measure. An instrument for determining the compressibility of liquids.

PIGMEN'TUM, Anat., Lat., *pigmentum*, paint. A term applied to a secretion in various parts of the body compared to paint. Thus the colouring matter of the Choroid is called the *Pigmentum nigrum*, or black paint. See *Albino.*

PILO'SE, Bot., Lat., *pilosus*, hairy. Covered with hairs.

PIN'EAL, Anat., Lat., *pinus*, meton., a pine-nut. A gland, small and conoidal, situated between the fornix and tubercula quadrigemina of the brain. Its use is unknown.

PIN'NATE, Bot., Lat., *pinnatus*, winged. A compound feather-veined leaf is so called; if a pinnate leaf be again divided, it becomes *bipinnate*, &c.

PINNOTHE'RES, Crust., Gr., πιννα (*pinna*), the pinna, (a bivalve shell,) and θερω (*therō*), to guard. A term applied to those little Crustacea (Crabs) which are so frequently found in our common Oyster. They were so named from the idea that they warned the animal, in whose shell they reside, of danger.

PIP'ERIN, Chem., Lat., *piper*, pepper. A crystallizable principle in pepper, crystallizing in rhomboidal prisms.

PI'SIFORM, Anat., Lat., *Pisum*, a Pea, and *forma*, shape. The pisiform bone—*Os Pisiforme*—is the smallest of the eight carpal bones, is something in shape like a Pea, and lies directly under the cuneiform bone.

PIS'TIL, Bot., Lat., *pistillum*, a pestle. The seed-bearing organ of a Plant which occupies the centre of the flower; so called from its resemblance (in some plants) to a pestle—hence *pistillate*, furnished with a pistil.

PITTIN'EA, Min., Gr., πιττα (*pitta*), pitch. The first Order of the third Class of Minerals.

PITU'ITARY, Anat., Lat., *pituita*, phlegm. A term applied to various parts, such as the sella turcica, which is called the pituitary fossa of the Sphenoid, the lining membrane of the nose, &c. &c.

PLACEN'TA, Bot., &c., Lat., *placenta* (Gr., πλαξ, a crust), a cake. A ridge to which the ovules of a Plant are attached.

PLAGIHÆ'DRAL, Min., Gr., πλαγιος (*plagios*), oblique, and ἑδρα (*hedra*), a facet or side. Applied to Crystals of which the facets are placed obliquely at the base of its pyramids.

PLAGIÆ'DRON, Min., Gr., πλαγιος (*plagios*), oblique, and ἑδρα (*hedra*), a base, or side. A Crystal in which the facets are situated obliquely at the base of its pyramids.

PLAGIOS'TOMA, Icth., Gr., πλαγα (*plaga*,) a cut, and στομα (*stoma*), mouth. The first Family of chondropterygious

Fishes, so called from the appearance of the mouth. It includes the Sharks, Rays, &c.

PLANE, Geom., Lat., *planus*, flat. A superficies everywhere flat and even.

PLAN'ET, Ast., Gr., πλανητης (*planetes*), wandering. Opaque bodies, so called because they do not, like fixed stars, remain stationary, but move round the Sun.

PLANIPEN'NATA, Ent., Lat., *planus*, plane, and *penna*, a wing. The second Family of neuropterous Insects, so called because their inferior wings are extended or plane.

PLANTAGINA'CEÆ, Bot., Lat., *Plantago*, the Plantain. A natural Order of Plants.

PLATANA'CEÆ, Bot., Gr., πλατανος (*platanos*), the Plane-tree. A natural order of Plants. It consists of the single genus Platanus, (the *Button-wood*,) which has but few species—one Asiatic, the other North American.

PLAN'TAR, Anat., Lat., *planta*, the sole of the foot. *Plantar aponeurosis*, *plantar muscles*, *plantar arteries*, &c.

PLANTIGRA'DA, Mam., Lat., *planta*, sole of the foot, and *gradus*, step. The first *Tribe* of the Carnivora, so called because all the animals which compose it bring the sole of the foot to the ground when they walk.

PLAN'TIGRADE, Mam., see *Plantigrada*. Stepping on the whole sole of the foot.

PLAN'UM, Anat., Lat., *planus*, smooth, even. The orbitar Plate of the ethmoid bone, the *Os Planum*.

PLAS'TIC, Phys., Gr., πλασσω (*plassō*), I form. The formative power in organic bodies is so called.

PLATI'NUM, Chem., Sp., *plata*, silver. A well known and valuable Metal discovered in the auriferous sands of certain rivers in South America, now found elsewhere, particularly in the Ural mountains. It is not acted on by acids, aqua regia excepted.

PLATYS'MA, Anat., Gr., πλατυς (*platus*), broad. Applied to a Muscle, the *Platysma Myoides*, situated on the side of the neck.

PLATYSO'MA, Ent., Gr., πλατυς (*platus*), flat, and σωμα (*sōma*), body. The third Family of tetramerous Coleoptera, so called because all the Insects which compose it are flattened or depressed.

PLECTOGNA'THI, Icth., Gr., πλεκω (*plekō*), to join, and γναθος (*gnathos*), jaw. The sixth Order of Fishes, so called because in all the species the maxillary and intermaxillary bones are soldered together, forming one piece.

PLESIOMORPH'IC, Min., Gr., πλησιος (*plesios*), near, and μορφη (*morphe*), form. Applied to Crystals of which the form is nearly similar, but not absolutely identical.

PLESIOSAU'RUS, Herp., Gr., πλησιος (*plesios*), near, and Σαυρος (*Sauros*), a Lizard. A singular genus of extinct animals remarkable for a very long neck, &c., that approached the Saurians in many parts of their structure.

PLEU'RA, Anat., Gr., πλευρα (*pleura*), the side, and also the membrane that lines it. A thin serous Membrane which lines the thorax, and is reflected from its walls over the lungs.

PLEURONEC'TIDES, Icth., Gr., πλευρα (*pleura*), the side, and νεκτης (*nektes*), a swimmer. A Family of compressed Fishes, so called because they all swim on the side of their body. The *Flounder* is a good example.

PLEX'US, Anat., Gr., πλεκω (*plekō*), to interlace. An irregular network formed by nerves and blood-vessels—a sort of compound anastomosis.

PLI'CATE, Bot., Ent., Lat., *plicatus*, plaited. In Botany, a species of vernation or præfoliation, the unfolded leaf being doubled like a fan. In Entomology, applied to the wings of certain Insects, which, when at rest, are folded in a similar manner.

PLICIPEN'NATA, Ent., Lat., *plica*, a fold, and *penna*, a wing. The third Family of neuropterous Insects, which has obtained its name from the wings being folded longitudinally or like a fan.

PLI'OCENE, Geol., Gr., πλειον (*pleion*), more, and καινος (*kainos*), recent. One of the groups of the tertiary strata, so called by Mr. Lyell, because it is of more recent origin than the *Eocene* or *Miocene*.

PLUMBA'GO, Chem., Lat., *plumbago*, a sort of lead. A Mineral, also called Graphite and black lead. It is occasionally found crystallized. It is one of the forms of carbon, as diamond is another.

PLUMBA'GIN, Chem., Lat., *Plumbago*, the plant so called. A principle lately discovered in the root of the *Plumbago europea.*

PLUMBAGINA'CEÆ, Bot., Lat., *Plumbago*, a plant so called by the Latins, a species of *Persicaria.*(?) A natural Order of Plants.

PLU'MOSE, Bot., Lat., *pluma*, a feather. Feathery, or fringed with hairs.

PLU'MULE, Bot., Lat., *plumula*, a little feather. The superior portion of the germinating bud when it appears between the cotyledons.

PLUTON'IC, Geol., Gr., Πλουτευς (*Plouteus*), Pluto, the mythological king of the infernal regions. The division of unstratified, crystalline, or hypogene rocks. They have received this name from the great depth at which they have cooled and crystallized.

PNEUMAT'ICS, Nat. Ph., Gr., πνευμα (*pneuma*), air. That branch of Nat. Ph. which treats of the mechanical properties of all compressible fluids, such as air and the gases.

PNEUMOGAS'TRIC, Anat., Gr., πνευμον (*pneumon*), lung, and γαστηρ (*gaster*), the stomach. The eighth pair of Nerves, so called because it is chiefly distributed to the thoracic and abdominal viscera.

PNEUMOS'TOMA, Ent., Gr., πνευμα (*pneuma*), air, and στομα (*stoma*), a mouth. Air-mouth, a term invented by Latreille to replace the unmeaning *Stigmata* of the older entomologists. The valvular openings of the tracheal or respiratory system of Insects.

PŒCILOP'ODA, Crust., Gr., ποικιλος (*poikilos*), varied, and πους (*pous*), foot. An Order of entomostracous Crustacea, so called because their feet are of different forms, and exercise different functions.

POIKILIT'IC, Geol., Gr., ποικιλος (*poikilos*), variegated. A group of rocks so called because they exhibit a red ground or base variegated with spots and streaks of blue, green, and buff.

POLAR'ITY, Nat. Ph., Gr., πολειν (*polein*), to turn. That property exhibited by bodies at liberty to move in all directions, of turning or pointing to given poles or arranging themselves in determinate directions.

POLARIZA'TION, Opt., see *Pole*. A property of light after double refraction in consequence of which, the pencils, after their emergence, become polar, or have poles possessing different properties. The discovery was made by Huygens.

POLE, Ast., &c., Gr., πολος (*polos*), circuit of the Heavens, from πολειν (*polein*), to turn, because the ancients thought the Heavens revolved. The poles are the extremities of the imaginary axis of the Earth, and are north and south. The Heavens also have their imaginary axis and poles, called poles of the Ecliptic, &c.

POLEM'OSCOPE, Opt., Gr., πολεμος (*polemos*), war, and σκοπεω (*skopeō*), I observe. A curved telescope invented by Hevelius and intended for military service.

POLEMONIA'CEÆ, Bot., Gr., Πολεμωνιον (*Polemōnion*), or Valerian, a plant so called by the Greeks, to which, according to Dioscorides, they attributed great virtues. A natural Order of Plants.

POL'LEN, Bot., Lat., *pollen*, flour. Granules of a definite form, which, to the naked eye, appear like dust, that are contained in the anthers of flowers.

POLYADEL'PHOUS, Bot., Gr., πολυς (*polus*), many, and αδελφος (*adelphos*), brother. Flowers in which the stamens are united into several sets.

POL'YCHROITE, Chem., Gr., πολυς (*polus*), many, and χρωμα (*chrōma*), colour. The colouring principle of Saffron; so called from the variety of colours it exhibits when acted on by different re-agents.

POLYGALA'CEÆ, Bot., Gr., πολυ (*polu*), much, and γαλα (*gala*), milk, because Cows that feed on the *Polygala* gave, it was said, much milk. A natural Order of Plants.

POLYG'AMOUS, Bot., Gr., πολυς (*polus*), many, and γαμος (*gamos*), nuptials. Plants in which some of the flowers are staminate only, a portion are perfect, the different kinds occurring either on the same or a different individual, as in the Palms.

POLYGAS'TRIC, Rad., Gr., πολυς (*polus*), many, and γαστηρ (*gaster*), stomach. A term applied by Ehrenburg to certain *Infusoria*, which are furnished, according to him, with numerous stomachs.

POLYGAS'TRICS, Zool., Gr., πολυς (*polus*), several, and γαστηρ (*gaster*), stomach. A group of Infusoria marked, according to Ehrenburg, by the presence of numerous stomachs. Hence the adjective *polygastric*.

POL'YGON, Geom., Gr., πολυς (*polus*), many, and γωνια (*gōnia*), angles. Every plane figure with more than four sides.

POLYGONA'CEÆ, Bot., Gr., πολυ (*polu*), many, and γονυ (*gonu*), knee. A plant called Polygonum, because its stalks are nodose or knotted. A natural Order of Plants. Among others, it contains our *P. fagopyrum*, or Buckwheat.

POLYG'INOUS, Bot., Gr., πολυς (*polus*), many, and γυνη (*gune*), female. Flowers with an indefinite number of pistils.

POLYHE'DRON, Geom., Gr., πολυς (*polus*), many, and ἑδρα (*hedra*), face or base. A solid contained within several rectilinear sides or faces.

POLYOP'TRON, Opt., Gr., πολυς (*polus*), many, and κατοπτρον (*katoptron*), a mirror. A glass through which objects appear multiplied, but diminished.

POLYPET'ALOUS, Bot., Gr., πολυς (*polus*), many, and πεταλον (*petalon*), leaf, or petal. Flowers with numerous petals.

POL'YPI, Rad., Gr., πολυς (*polus*), many, and πους (*pous*), foot. The fourth Class of the Radiata, or radiated Animals, so called because the tentacula which surround their mouth give them a slight resemblance to an Octopus, called *Polypus* by the ancients.

POL'YSCOPE, Opt., Gr., πολυς (*polus*), several, and σκοπεω (*skopeō*), I see. Applied to lenses or instruments which multiply an object.

POLYSEP'ALOUS, Bot., Gr., πολυς (*polus*), many, and Lat., *sepes*, a hedge. Flowers furnished with numerous *sepals*.

POLYTECH'NIC, Gr., πολυς (*polus*), many, and τεχνη (*techné*), art. A new word that means relating to, or embracing, various arts and sciences—the *Polytechnic school* of Paris, for instance.

POLYTHAL'MOUS, Mal., Gr., πολυς (*polus*), many, and θαλαμυς (*thalamus*), a dwelling. Many chambered.

POLYZO'NAL, Opt., Gr., πολυς (*polus*), many, and ζωνη (*zōne*), zone. The name of a lens constructed by Brewster, consisting of several zones or rings. The French employ it in their light-houses.

POME, Bot., Lat, *Pomum*, an Apple. A fruit composed of a fleshy calyx, enclosing two or more carpels.

PONS, Anat., Lat., *pons*, a bridge. A term applied to parts of organs of the body, as to the brain, the *Pons varolii*, *Pons zygomaticus*, &c.

POPLIT'EAL, Anat., Lat., *poples*, the ham. Relating to the Ham, as *Popliteal artery*, *P. muscle*, *P. nerves*, &c.

POP'ULIN, Chem., Lat., *Populus*, the Poplar. A crystalline substance found by Braconnot in the bark of a Populus.

POR'CATE, Mal., Lat., *porca*, a ridge. Marked with raised longitudinal lines.

POR'CATE, Ent., Lat., *porca*, a ridge. Ridged, or marked with elevated parallel longitudinal lines.

PORES, Anat., Gr., πορος (*poros*), a passage. Minute openings at the extremities of vessels by which fluids are passed out or taken in.

PO'RISM, Geom., Gr., πορισμα (*porisma*), a corollary, or supplement, from πορiζομαι (*porizomai*), to conclude from a demonstration. A term formerly applied to a proposition demonstrated for the purpose of passing to, or demonstrating, others of more importance. See *Lemma*.

POR'PHYRY, Min., Gr., πορφυρα (*porphura*), purple. An igneous Rock containing crystals of felspar.

PORREC'TED, Mal., Lat., *porrigere*, to extend. Projecting.

POR'TA, Anat., Lat., *porta*, from the Gr., πυλη (*pulē*), a gate. That part of the liver into which the portal vein and hepatic artery enter, and from which the hepatic duct issues, as through a gate.

POR'TAL, Anat., see *Porta*. Relating to the Porta of the liver, and to the circulation in it, which latter is called the *Portal circle*.

PORTULACA'CEÆ, Bot., Lat., *Portulaca*, Purslane. A natural Order of Plants.

PORYDROS'TERER, Chem., Gr., πορω (*porō*), to give, ὑδωρ (*hudōr*), water, and στερεος (*stereos*), solid. An Instrument, invented by Paucton, which marks the specific gravity of a solid as compared to that of an equal volume of distilled water.

POS'TULATE, Geom., Lat., *postulare*, to demand. Something assumed or taken for granted, as that a straight line may be drawn from any one point to any other point.

POTAS'SIUM, Chem., *Pot-ashes*, so called from the pot or vessel in which they are made. A Metal obtained from potash by Davy, in 1807, by subjecting it to the action of a powerful Voltaic battery. It is solid at an ordinary temperature, but so soft as to yield like wax to pressure.

PREFLORA'TION, Bot., *præ*, before, and *florere*, to open, or blow. The manner in which the floral organs are arranged in the flower bud.

PREFOLIA'TION, Bot., Lat., *præ*, before, and *folatio*, leafing. The manner in which leaves are folded or packed in the bud before they expand.

PREHEN'SILE, Bot., see *Prehensility*. Applied to Plants that contract when touched as by insects lighting on them, as is the case with the *Dionea muscipula*, or Venus's Fly-Trap, the *Mimosa pudica*, or Sensitive plant, &c.

PREHENSIL'ITY, Phys., Lat., *prehendere*, to seize. A function which is peculiar to the hand, depending on the flexibility of the fingers and the opposability of the thumb.

PREOPER'CULUM, Icth., Lat., *præ*, before, and *operculum*, a lid. A Bone so called in the head of fishes on which the operculum or gill-cover plays.

PRIMULA'CEÆ, Bot., Lat., *primulus*, dimin., of *primus*, the first, because the Primula, or Primrose, is among the first to appear in the spring. A natural Order of Plants.

PRISM, Geom., Opt., Min., Gr., πρισμα (*prisma*), a prism. A Solid of which the two ends form equal parallel and similar plane figures, and the sides parallelograms. In Optics, a solid prism of glass used for the purpose of decomposing light.

PRIS'MOID, Geom., Gr., πρισμα (*prisma*), a prism, and ειδος (*eidos*), form. A solid, the two ends of which present two rectangles parallel to each other, and its upright sides four trapezoids.

PROB'LEM, Geom., &c., Gr., προβλημα (*problema*), a proposition, from βαλλω (*ballō*), to throw out. A proposition, or a question proposed.

PROBOSCIDIA'NA, Mam., see *Proboscidians*. The first Family of the Pachydermata. It contains but two genera, *Elephas* and *Mastodon*.

PROBOSCID'IANS, Mam., Gr., προβοσκις (*proboskis*), the trunk of the Elephant. A term applied to the *Elephant* and *Mammoth*, or *Mastodon*.

PROD'ROMUS, Nat. Hist., Gr., προ (*pro*), before, and δρομος (*dromos*), course. Any thing that precedes another. It is usually applied to a short work on Zoology, Botany, &c., that precedes one larger and more complete.

PROEMPTO'SIS, Ast., Gr., προ (*pro*), before, and εμπιπτω (*empiptō*), to fall on, or happen. A lunar Equation, so called, because it prevents the announcement of a new Moon a day too soon.

PRO'LATE, Geom., Lat., *pro*, by, and *latus*, side. A term applied to a Spheroid when the revolution is made about the transverse axis.

PRONA'TOR, Anat., see *Pronation*. A term applied to those Muscles which produce pronation.

PRONA'TION, Phys., Lat., *pronus*, prone, lying on the face. That motion of the hand in which the palm is turned downwards or towards the Earth, the whole limb being extended horizontally. The reverse of *supination*.

PROPHYLAC'TIC, Hyg., Gr., προφυλλασσω (*prophullassō*), I defend. Any means used to prevent sickness, thus exercise, temperance, cheerfulness, &c., are prophylactic.

PROP'OLIS, Ent., Gr., προ (*pro*), before, and πολις (*polis*), city. A tenacious substance obtained by Bees from certain plants, such as the Poplar, with which they cement the exterior (openings) of their hive.

PROSENCHY'MA, Bot., Gr., προσεγχεω (*prosegcheō*), I pour more. That sort of cellular tissue in plants of which the cellules are narrowed at the end and overlap each other, the state of transition from cellular tissue to woody fibre.

PROSENNEAHE'DRON, Min., Gr., προς (*pros*), near, εννεα (*ennea*), nine, and ἑδρα (*hedra*), base. A Crystal that presents nine different faces on two adjacent planes. Haüy.

PROSTAPHERE'SIS, Ast., Gr., προσθε (*prosthe*), before, and αφαιρεω (*aphaireō*), to lessen. See *Equation*, which has the same meaning and is more generally used.

PROTE'IN, Chem., Gr., πρωτευω (*prōteuō*), I rank first. The basis of animal and vegetable fibrin, albumen, casein, and gluten.

PROTHO'RAX, Ent., Gr., προ (*pro*), before, and θωραξ (*thōrax*), thorax or chest. The anterior of the three segments of the thorax of an Insect.

PRO'TO, Chem., Gr., πρωτος (*prōtos*), first. A prefix signifying first degree, or least quantity of oxygen.

PROTOX'IDE, Chem., Gr., πρωτος (*prōtos*), first, and οξυς (*oxus*), acid. A term implying that the elementary body to which it is prefixed contains the least proportion of oxygen.

PSALTE'RIUM, Anat., Lat., *psalterium*, a psalter. The third of the four stomachs of ruminating Animals, so called because it is thrown into plaits or folds resembling the leaves of a book.

PSELA'PHII, Ent., Gr., ψιλος (*psilos*), naked. The third Family of trimerous Coleoptera, thus named because their elytra cover only part of the abdomen, leaving the rest naked.

PSEU'DO, Gr., ψευδης (*pseudes*), false. A prefix frequently employed in scientific terms.

PSEUDOMOR'PHIC, Min., Gr., ψευδης (*pseudes*), false, and μορφη (*morphe*), form. Presenting a deceptive figure. Haüy.

PSO'Æ, Anat., Gr., ψοα (*psoa*), the loin. Two Muscles so called, *Psoas magnus* and *P. parvus.*

PSYCHOL'OGY, Phys., Gr., ψυχη (*psuche*), mind, and λογος (*logos*), a treatise. The physiology of the Brain—a treatise on the intellectual faculties and moral manifestations.

PSYCHROM'ETER, Gr., ψυχρος (*psuchros*), cool, and μετρον (*metron*), measure. An Instrument invented by August, of Berlin, for measuring the tension of the aqueous vapour contained in the atmosphere.

PTERODAC'TYLUS, Herp., Gr., πτερον (*pteron*), a wing, and δακτυλος (*daktulos*), finger. A genus of extinct Reptiles marked by the extreme length of one of the fingers, presumed to have supported an expansion of the skin forming a wing.

PTEROP'ODA, Mal., Gr., πτερον (*pteron*), wing or fin, and πους (*pous*), foot. The second Class of the Mollusca, so called because, instead of feet, their organs of locomotion consist of fins placed like wings on each side of the mouth.

PTERY'GODA, Ent., Gr., πτερυξ (*pterux*), a wing. A name given by Latreille to two small movable bodies, somewhat resembling epaulets, found near the base of the first legs in lepidopterous Insects. Similar, but *crustaceous* and smaller organs occupy the same position in the Rhipiptera, q. v.

PTER'YGOID, Anat., Gr., πτερυξ (*pterux*), a wing, and ειδος (*eidos*), shape. Two processes, so called, at the inferior surface of the sphenoidal Bone. The same name is applied to arteries, muscles, &c., of the same processes.

PTY'ALISM, Hyg., Gr., πτυαλιζω (*ptualizō*), I spit. An excessive flow of saliva. Salivation.

PULMONA'RIÆ, Ent., Lat., *pulmo*, a lung. The first Order of the Arachnides, so called because these Spiders breathe by means of lungs, or air-sacks.

PULMONE'A, Mal., Lat., *pulmo*, a lung. The first Order of gasteropodous Mollusca, so called because they respire free air in a sort of sac (or lung) formed by the mantle. It includes the *Slug*, *Snail*, &c.

PULSE, Phys., Lat., *pulsare*, to beat, or pulsate. The contraction and dilatation of the arteries, produced by those of the heart, and nearly synchronous with them.

PUNC'TATE, Bot., Ent., Lat., *punctum*, a point. In Botany, dotted. In Entomology, marked with fine points, as if made with a pin or needle.

PU'PA, Ent., Lat., *pupus*, a puppet. The second state of the existence of an Insect, synonymous with *Nymph*.

PU'PIL, Anat., Lat., *pupilla*, the pupil of the eye. A circular aperture in the centre of the Iris, directly before the centre of the crystalline lens.

PUPIP'ARA, Ent., Lat., *pupus*, a nymph, (see *Pupa*,) and *paro*, I produce. The sixth Family of dipterous Insects, so called because the female deposits no eggs properly so called, but a soft shell-like envelope, within which is the larva passing into the state of a pupa.

PUPIV'ORA, Ent., Lat., *pupus*, a puppet, and *voro*, I eat. The second Family of hymenopterous Insects, so called because, in their larva state, they are carnivorous, and feed on the eggs, pupæ, &c., of other Insects.

PUTA'MEN, Bot, see *Endocarp*, with which it is synonymous.

PYCNODON'TIC, Icth., Gr., πυκνος (*puknos*), thick, and οδους (*odous*), tooth. Thick-toothed, a term usually restricted to certain Fishes, but that may be applied to any animal with short, thick teeth.

PYCNOGON'IDES, Ent., Gr., πυκνος (*puknos*), crowded, and γονυ (*gonu*), knee. The second Family of the tracheal Arachnides, so called because their very long legs have eight or nine joints or knees.

PYLOR'IC, Anat., see *Pylorus*. Relating to the Pylorus, as the *pyloric valve*, &c.

PYLO'RUS, Anat., Gr., πυλη (*pule*), a gate, and ουρος (*ouros*), a keeper. The inferior or right orifice of the stomach, so called because it is furnished with a fibrous ring acting like a valve which closes that orifice of the stomach.

PYR'AMID, Geom., Gr., πυραμις (*puramis*), a pyramid. A solid of which the sides are triangles meeting in a point at the vertex, and the base of *any* plane figure; thus we have square, triangular, pentagonal, &c., pyramids.

PYRI'TES, Min., Gr., πυρ (*pur*), fire. Sulphurets of copper and iron, so called because they sometimes spontaneously ignite.

PYRITIN'EA, Min., Gr., πυρ (*pur*), fire, whence πυριτης (*pyrites*). The ninth Order of the second Class of Minerals.

PY'RO, Chem., Gr., πυρ (*pur*), fire. A prefix usually applied to certain Acids obtained by subjecting organic acids to heat—ex., the pyrogallic, pyrotartaric, &c.

PYROLIG'NEOUS, Chem., Gr., πυρ (*pur*), fire, and Lat., *lignum*, wood. An acid liquid so called, obtained along with tar and various gaseous products from the destructive distillation of wood.

PYROM'ETER, Nat. Ph., Gr., πυρ (*pur*), fire, and μετρον (*metron*), measure. An Instrument, first invented by Musschenbroek, for determining the degree of action of fire on metals and other solid bodies.

PYROPH'ORUS, Chem., Gr., πυρ (*pur*), fire, and φερω (*pherō*), I bear. A substance which becomes red-hot when exposed to the air, and ignites and burns vividly in oxygen. It can be prepared from alum and sugar, or from the sulphate of potash.

PYROSO'MA, Rad., Gr., πυρ (*pur*), fire, and σωμα (*sōma*), body. A group of those singular compound beings called *Ascidia*, so named from the phosphorescent light they diffuse in the ocean.

PYR'OXENE, Min., Gr., πυρ (*pur*), fire, and ξενος (*xenos*), stranger, or guest. A Mineral formerly called volcanic schorl. It received its present name from being but an accidental or occasional constituent of volcanic products.

PYROXYL'IC, Chem., Gr., πυρ (*pur*), fire, and ξυλον (*xulon*), wood. A term applied to what is called in commerce Wood-spirit. It is a volatile, colourless, inflammable Acid, of an alcoholic, but empyreumatic, taste and smell.

PYX'IS, Bot., Gr., πυξις (*puxis*), a box. A capsule in which the dehiscence is transverse, and not longitudinal.

QUAD'RANT, Ast., Geom., Lat., *quadrans*, the fourth, of a circle. An Instrument so called, invented by Godfrey, an American.

QUAD'RATURE, Ast., Lat., *quadratura*, the act of squaring. The position of the Moon when ninety degrees from the Sun.

QUADRA'TUS, Anat., Lat., *quadra*, a square. A term applied to several Muscles, so called from their square figure. Such are the *Quadratus femoris*, &c.

QUADRIGEM'INA, Anat., Lat., *quadrigeminus*, four. A term applied to four cerebral Tubercles situated at the posterior surface of the pons varolii. They give origin to the second (optic) pair of nerves.

QUADRIP'LICATE, Mal., Lat., *quadrinus*, of four, and *plica*, a fold. Having four plaits or folds.

QUADRU'MANA, Mam., Lat., *quadrinus*, of four, and *manus*, hand. Four-handed mammalia. The second Order of the Mammalia, so called because animals which compose it have a hand at each extremity. It includes the Orangs, Monkeys, &c.

QUADRU'MANOUS, Mam., see *quadrumana*. Four-handed.

QUAQUA-VER'SAL, Geol., Lat., *quaqua*, each way, and *vertere*, to turn. A sort of *dip*, one that turns each way, or is inclined to every point of the compass.

QUAR'TILE, Ast., Lat., *quartus*, a fourth. The relative position of two planets when ninety degrees or one-fourth of the Zodiac from each other.

QUARTZ, Min., Ger., *quartz*. Applied to all (especially the purer) varieties of Silica, as to rock crystals, &c.

QUI'NATE, Bot., Lat., *quinque*, five. A quinate leaf is one composed of five leaflets.

RACE'ME, Bot., Lat., *racemus*, a bunch or cluster. That sort of inflorescence in which a single flower is produced on a pedicel in the axil of each bract, whilst the axis continues to lengthen, as in the *Currant*, *Pokeberry*, &c.

RA'CHIS, Anat., Gr., ραχις (*rachis*), the spinal column. The vertebral column—back-bone, improperly so termed.

RA'DIAL, Anat., see *Radius*. Relating to the Radius, as radial artery, nerve, &c.

RADIA'TA, Zool., Lat., *radiatus*, rayed. Radiated animals. The fourth and last of the great divisions of the Animal Kingdom, so called because the plan of structure is a radiated one, well marked in the *Asteria* or Star-fish.

RA'DIATED, Anat., Zool., Bot., Lat., *radius*, a ray. Rayed, applied to Muscles, &c., which have this form.

RADIATOL'OGY, Zool., Lat., *Radiata*, q. v., and Gr., λογος (*logos*), a treatise. That branch of Zoology which investigates the history of the radiated animals.

RAD'ICAL, Chem., Lat., *radix*, a root. Chemically speaking, a radical which may be either simple or compound, forms an *acid* with hydrogen, and a *salt* with a metal.

RAD'ICLE, Bot., Lat., *radicula*, a little root. That portion of the embryo plant which, in the act of germination, is below the plumule, and finally becomes the root.

RA'DIUS, Anat., Lat., *radius* (Gr., ραβδος), a rod. One of the two bones of the fore-arm, and to which the hand is articulated by means of the carpus.

RA'DIUS, Geom., Lat., *radius*, a measuring rod. Applied by analogy to the spokes of a wheel, &c. The radius (of a circle) is a right line drawn from the centre to the circumference.

RA'MUS, Anat., Lat., *ramus*, a branch. A term applied to branches of arteries, veins, nerves, and to processes of bones.

RANUNCULA'CEÆ, Bot., Lat., *Ranunculus*. Butter-cup. A natural Order of Plants.

RA'PHE, Anat., Gr., ραφη (*raphe*), a seam, from ραπτώ (*raptō*), to sew. Applied to certain lines in the soft parts which resemble seams.

RAPTO'RES, Orn., Lat., *raptor*, a robber. A term employed by some authors to designate the Birds of prey—the *Rapaceæ*, or *Accipitres.*

RASO'RES, Orn., Lat., *rado*, I scratch. Gallinaceous Birds, or those that habitually scratch the earth in search of food.

RA'TIO, Geom., Lat., *ratio*, proportion. Defined by Euclid as "a mutual relation of two magnitudes of the same kind to one another in respect of quantity," and by Leslie as "a certain mutual habitude of two homogeneous magnitudes with respect to *quantity* or *numerical composition.*"

REA'SON, Phys., Lat., *ratio*, from *reor*, to think. That faculty of the brain which, by thought, enables animals to vary their acts according to circumstances, and thus to arrive at a right conclusion by the comparison of ideas. See *Instinct.*

RECEP'TACLE, Bot., see *Torus.*

RECEPTAC'ULUM, Anat., Lat., *receptaculum*, a receptacle. A term chiefly applied to the inferior and distended portion of the thoracic duct, the *receptaculum chyli;* also to a triangular cavity between the two layers of the dura mater on the petrous portion of the temporal bone—the *R. Cotunnii.*

REC'TANGLE, Geom., Lat., *rectus*, straight, and *angulus*, angle. A parallelogram of which the angles are all right angles.

RECTRI'CES, Orn., Lat., *rectrix*, a director. The tail feathers of Birds, so called because they govern or direct their line of motion in flight.

REC'TUM, Anat., Lat., *rectus*, straight. The terminal portion of the colon.

REC'TUS, Anat., see *Rectum.* A term applied to various Muscles on account of their straightness, as the *Rectus abdominis*, *Recti oculi*, &c.

RECUR'RENT, Anat., Lat., *recurrere*, to run back. Applied to nerves and arteries which ascend towards their origin.

REFRAC'TION, Opt., Lat., *refractus*, broken. The deflexion or bending aside of rays of light in passing through transparent media. See *Dioptrics*.

REFRANGIBIL'ITY, Opt., Lat., *re*, again, and *frango*, I break. The susceptibility to refraction. Most usually restricted to the expression of the degree of that susceptibility in the different rays of the spectrum.

REG'IMEN, Hyg., Lat., *regimen*, government, conduct. Usually employed as a synonyme of *Diet*. A methodical and rational use of food and drink.

REM'IPEDS, Ent., Lat., *remus*, an oar, and *pes*, a foot. A group of coleopterous Insects, so called because their tarsi or feet are oar-shaped, and well adapted for swimming.

RE'NAL, Anat., Lat., *ren*, kidney. Relating to the Kidneys, as *Renal artery*, *R. capsule*, *R. veins*, &c.

REN'IFORM, Bot., Lat., *ren*, kidney, and *forma*, shape. Kidney-shaped. Applied to Leaves.

REPTIL'IA, Zool., Lat., *repo*, I crawl. The third Class of vertebrated Animals. On the basis of a comparison between the quantity of respiration and the organs of motion of the animals composing it, the class has been divided into four orders, Chelonia, Sauria, Ophidia, and Batrachia, q. v.

RESEDA'CEÆ, Bot., Lat., *Reseda*, Mignonette. A natural Order of Plants.

RES'IN, Chem., Lat., *resina*, from Gr., ῥέω (*rheō*), to flow. A proximate vegetable principle, consisting of oxygen, hydrogen, and carbon.

RESPIRA'TION, Phys., Lat., *respiro*, I breathe, or take breath. The most universal and vital function of all organized bodies, consisting essentially in the absorption of oxygen and the liberation of carbonic acid.

RESU'PINATE, Bot., Lat., *resupinare*, to lie on the back. Inverted.

RE'TE, Anat., Lat., *rete*, a net. A term applied to interlaced fibres, vessels, &c.; hence *Reticular*, *Reticulated*, &c., or net-like.

RETIA'RIÆ, Ent., Lat., *rete*, a net. Spiders which construct webs in the form of a net to entrap their prey. Some spiders do not, but pursue their game in the open field, and secure it like the tiger. The former constitute the *Sedentariæ*, or sedentary arachnids of Latreille; the latter his *Vagabundæ*, or wanderers.

RETIC'ULUM, Mam., Lat., *rete*, a net. The second stomach, vulgarly called the *honeycomb*, of ruminating Animals. It is thus named from the hexagonal cells which occupy its internal surface.

RET'INA, Anat., Lat., dimin., *rete*, a net. The most internal of the three principal Tunics of the eye and its vital portion. It is thus named because one of its two layers is somewhat reticulated.

RETORT', Chem., Lat., *retortus*, bent back, from the usual position of the neck, or because it *retorts*, or sends back, part of the elements placed in it. A chemical utensil used for distillation.

RET'ROGRADE, Ast., Lat., *retro*, back, and *gradior*, to go. An apparent motion of a planet that seems to move backward, a delusion arising from the view being taken from the Earth. It is sometimes termed *Antecedentia*.

RETROR'SE, Bot., Lat,. *retrorsum*, backwards. Bent backwards.

REV'OLUTE, Zool., Lat., *revolvo*, I roll back. Applied to parts turned backwards or outwards.

REV'OLUTE, Bot., Lat., *revolvo*, I roll back. Rolled backwards.

RHAMNA'CEÆ, Bot., Gr., 'Ραμνος (*Rhamnos*), Buck-thorn. A natural Order of Plants.

RHEUTIN'EA, Min., Gr., ῥευτος (*rheutos*), fluid. The first Order of the first Class of Minerals. The species are all fluid or gaseous.

RHIPIP'TERA, Ent., Gr., ῥιπις (*rhipis*), a fan, and πτερον (*pteron*), wing. The eleventh Order of Insects, so called from the manner in which the wings are folded, which is like that of a fan. It contains but two genera, Stylops and Xenos, both parasitical.

RHIZO'MA, Bot., Gr., ῥιζα (*rhiza*), a root. A rootstock or *prostrate stem*, giving off roots from its inferior surface. The *Calamus* or *Sweet-Flag* of our marshes affords a good example.

RHO'DIUM, Chem., Gr., ῥοδον (*rhodon*), a rose. A Metal discovered by Wollaston in the ore of platinum. The solutions have a beautiful red colour, whence the name.

RHOM'BOID, Bot., see *Rhomboideus*. Oval, a little angular in the middle.

RHOM'BOID, Geom., see *Rhombus*, and Gr., ειδος (*eidos*), shape. A parallelogram, in which the angles are not right angles.

RHOMBOIDE'US, Anat., Gr., ῥομβος (*rhombos*), a rhombus, and ειδος (*eidos*), form. The name of a Muscle on the back of the neck and thorax, so called from its shape.

RHOM'BUS, Geom., Gr., ῥομβος (*rhombos*), a rhombus. A quadrilateral figure of which the sides are all equal, but the angles not right angles. Sometimes called a *Lozenge*.

RHYNCOPH'ORA, Ent., Gr., ῥιν (*rhin*), nose, and φερω (*phero*), I carry. The first Family of tetramerous Coleoptera, so called because the entire head is prolonged into a proboscis. The little, black, noxious insect that destroys our dried Peas may be examined as a specimen.

RI'MA, Anat., Lat., *rima* (Gr., ρησσω, to split), a slit, or fissure. The cleft-like opening between and above the superior vocal cords of the larynx, through which air passes into the trachea—the *Rima Glottidis*, or Cleft of the Glottis.

RIMO'SE, Nat. Hist., Lat., *rima*, a fissure. A term applied to any body, or part, resembling the bark of a tree in the numerous and minute depressions which run into each other.

RIN'GENT, Bot., Lat., *ringor*, to pout. A term expressive of the separated lips and open throat of the corolla of certain Flowers.

RODEN'TIA, Mam., Lat., *rodere*, to gnaw. The fifth Order of the Mammalia, so called because all the animals which compose it have a dental system so arranged that they cannot seize a living prey, or even *cut* their food—they can only *gnaw* it. The *Rats*, *Squirrels*, *Beaver*, &c., are Rodentia.

ROSA'CEÆ, Bot., Lat., *Rosa*, the Rose. A natural Order of Plants. It includes not merely the Roses proper, but the *Almond*, *Peach*, *Cherry*, &c.

ROS'TRATE, Bot., Lat., *rostratus*, beaked. The same.

ROS'TRUM, Ent., Lat., *rostrum*, a beak or bill. Applied by Entomologists to a compound organ found in certain Insects (*Suctoria*), consisting of setaceous lancets, forming, by their junction, a sort of sucker, which is received into a sheath, and terminated by two lips.

ROTIF'ERA, Rad., Lat., *rota*, a wheel, and *ferre*, to carry. The first Order of the Infusoria, so called from a singular organ at the head furnished with denticulated edges, of which the successive vibrations give the whole the appearance of one or more revolving wheels.

RUBIA'CEÆ, Bot., Lat., *Rubia*, the Madder. A natural Order of Plants. Here we find the various species of *Cinchona*, that yields its well known Peruvian bark, *Ipecacuanha*, &c.

RUFES'CENT, Nat. Hist., Lat., see *Rufous*. Tinged with red.

RU'FOUS, Nat. Hist., Lat., *rufus*, yellowish red. Reddish.

RUGO'SE, Bot., Lat., *rugosus*, wrinkled. The same.

RUMINAN'TIA, Mam., see *Rumination*. The eighth Order of the Mammalia. It comprises all the hoofed animals of the class which chew the cud, the *Camel*, *Deer*, *Ox*, *Goat*, *Sheep*, &c.

RUMINA'TION, Phys., Lat., *ruminare*, to re-chew what has been swallowed, or to chew the cud. A distinguishing character of the Ruminantia, depending on the structure of their stomachs, of which they have four.

RUN'CINATE, Nat. Hist., Lat., *runcina*, a saw. Applied chiefly to lyrate leaves, the lobes of which are sharp and pointing towards the base—ex., the *Dandelion*.

RUTA'CEÆ, Bot., Lat., *Ruta*, the Rue. A natural Order of Plants.

SAC, Anat., Gr., *σακκος* (*sakkos*), whence Lat., *saccus*, a sac or bag. A term frequently applied to various Membranes in the form of a sac.

SAC'CULUS, Anat., see *Sac*, of which it is a diminutive. A little sac.

SAC'RAL, Anat., see *Sacrum*. Relating to the Sacrum, as *Sacral arteries*, *nerves*, *plexus*, &c.

SAC'RO, Anat., see *Sacrum*. A prefix to names of various other organs in the vicinity of the sacrum, such as *Sacro-coccygeal*, *Sacro-iliac*, *Sacro-sciatic*, &c.

SAC'RUM, Anat., Lat., *sacer*, sacred. The *Os Sacrum*, or sacred bone forms the posterior median boundary of the pelvis, and received its name from being found in that part of the animal which was offered in sacrifice to the Gods.

SAG'ITTAL, Anat., Lat., *sagitta*, an arrow. A term applied to one of the sutures of the Cranium, because it has the direction of an arrow fitted to the bow.

SAG'ITTATE, Bot., Lat., *sagitta*, an arrow. Shaped like an arrow-head.

SALICA'CEÆ, Bot., Lat., *Salix*, the Willow. A natural Order of Plants, containing the *Willows* and *Poplars*.

SALI'VA, Anat., Lat., *saliva*, spittle. A secretion from certain glands of the mouth, essential to the process of digestion.

SAL'IVARY, Anat., see *Saliva*. Relating to Saliva, as salivary glands, &c.

SALMONI'DES, Icth., Lat., *Salmo*, the Salmon. The fourth Family of abdominal Malacopterygiens. It includes the *Salmon*, *Trouts*, &c.

SALTATO'RIA, Ent., Lat., *saltare*, to jump. The second Family of orthopterous Insects, so called from the length of their legs, which enables them to move by prodigious jumps. It includes the *Grasshoppers*, &c.

SALTS, Chem., Lat., *sal*, from the Gr. *ἁλς* (*hals*), salt. The combination of any acid with a base, marked, in chemical nomenclature, by a termination in *ate*, or *ite*.

SAM'ERA, Bot., Lat., *samera*, seed of the Elm. An Achenium with a winged apex, as in the Elm.

SAPHE'NA, Anat., Gr., σαφης (*saphes*), visible. A name given to Veins of the lower extremity that empty into the femoral vein.

SAPOTA'CEÆ, Bot., Sp., *Sapota*, an eatable fruit of the tropics. A natural Order of Plants.

SAR'COCARP, Bot., Gr., σαρξ (*sarx*), flesh, and καρπος (*karpos*), fruit. The intermediate of the *three* walls of a *Pericarp*, usually fleshy.

SARRACENA'CEÆ, Bot., Fr., *Sarrazin*, a physician so called, to whom Tournefort dedicated the genus *Sarracenia*, in consequence of his having sent the first specimen to him. A natural Order of Plants.

SARTO'RIUS, Anat., Lat., *sartor*, a tailor. A Muscle so called because its action is to cross one leg over the other.

SAT'ELLITE, Anat., Lat., *satelles*, the guard of a king. Celestial bodies so called, which move round a primary planet, as the Moon round the Earth.

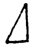
SAU'RIA, Herp., Gr., Σαυρος (*Sauros*), a Lizard. The second Order of Reptiles. Among other Saurians, it includes the *Crocodiles*, *Alligators*, &c.

SAXIFRAGA'CEÆ, Bot., Lat., *Saxifraga*, the Sassafras tree. A natural order of Plants.

SCA'BROUS, Bot., Lat., *scabrum*, rough. Rough to the touch.

SCA'LÆ, Anat., Lat., *scala*, a ladder. The scalæ of the Cochlea are cavities formed by the convolutions of the lamina spiralis—one *looks* into the tympanum, the other opens into the vestibule.

SCALE'NE, Geom., Gr., σκαληνος (*skalenos*), lame, or limping. A triangle so called, because its three sides are all unequal.



SCALE'NUS, Anat., Gr., σκαληνος (*skalenos*), lame, limping. Muscles forming a scalene or unequal triangle. There are two of them, the anterior and posterior, or *anticus* and *posticus*.

SCANSO'RIÆ, Orn., Lat., *scansorius*, climbing. The third Order of Birds, so called because the species have two toes directed forwards and two backwards, which arrangement enables them to climb. It contains the *Parrots*, *Wood-Peckers*, &c.

SCAPE, Bot., Lat., *scapus*, a stalk. The flower-stalk of a stemless plant—that of the Dandelion furnishes a good example.

SCA'PHA, Anat., Gr., σκαφη (*skaphe*), a skiff. The cavity in the pavilion of the ear between the helix and the antihelix.

SCAPTIN'EA, Min., Gr., σκαπτος (*skaptos*), dug out. The seventh Order of the second Class of Minerals.

SCAP'ULA, Anat., Lat., *scapulæ*, shoulders. The shoulder-blade; hence *scapular*, relating to the scapula.

SCA'PUS, Orn., Lat., *scapus*, a stalk. That part of the feather which forms the stem, including the *calamus*, or quill.

SCHINDYLE'SIS, Anat., Gr., σχιζης (*schizes*), a cleft, or σχινδαλμος (*scindalmos*), a chip or fragment. That sort of articulation in bones formed by what a carpenter would call tongue and groove, such as the articulation of the vomer.

SCHIST, Geol., Gr., σχιζω (*schizō*), to split. All the varieties of slate.

SCHIS'TOSE, Geol. See *Schist*. Applied to all rocks of a slaty texture.

SCHIZANDRA'CEÆ, Bot., Gr., σχιζω (*schizō*), to split, and ανηρ (*aner*), male. Because the anthers of the genus Schizandra are split in two. The third Order of flowering Plants.

SCHNEIDE'RIAN, Anat., from Schneider, an Anatomist. A term frequently applied to the pituitary membrane.

SCHORL, Min., Sw., *scorl*, brittle. Imperfect crystals of *Tourmaline*, q. v.

SCIAT'IC, for **ISCHIAT'IC**, Anat., Gr., ισχιον (*ischion*), the hip. Applied to nerves, a notch, blood-vessels, &c., of the *Innominatum*.

SCLERANTHA'CEÆ, Bot., Gr., σκληρος (*skleros*), hard, and ανθος (*anthos*), flower. A natural Order of Plants so called, from the indurated tube of their flowers.

SCLEROT'IC, Anat., Gr., σκληρος (*skleros*), hard. The external tunic of the eye; so called from its toughness.

SCOMBEROI'DES, Icth., Gr., Σκομβρος (*Skombros*), the Mackerel, and ειδος (*eidos*), form. The seventh Family of acanthopterygious Fishes. It comprises our *Mackerel*, *Tunny*, *Sword-Fish*, &c.

SCO'RIÆ, Geol., Lat., *scoria*, Cinder, or Slags of basaltic or augitic lava.

SCOR'POID, Bot., Gr., Σκορπιος (*Skorpios*), Scorpion, and ειδος (*eidos*), form. A term applied to unilateral racemes, which are revolute before they blow, or expand.

SCROBIC'ULATE, Bot., Lat., *scrobiculus*, a little depression. Pitted.

SCROPHULARIA'CEÆ, Bot., Lat., *scrophularia*, Blind-Nettle, Scrophularia. A natural Order of Plants. It contains the *Mullen*, *Digitalis*, &c.

SCU'TATE, Zool., Lat., *scutum* a shield. Covered with large Scales.

SEBA'CEOUS, Anat., Lat., *sebum*, suet. A term applied to Glands or Follicles that secrete a suet-like fluid, and to the fluid itself.

SE'CANT, Geom., Lat., *seco*, I cut. A straight line drawn from the centre of a circle to one extremity of an arc, and produced until it meets the tangent to the other.

SECRE'TION, Phys., Lat., *secernere*, to secrete. That function (of which the glands are the organs) by which all the fluids of the body, except blood and chyle, are separated or secreted from the blood. It is for this reason they are called the *secretions*.

SEC'TOR, Geom., Lat., *secare*, to cut. The space contained between an arc and the two radii drawn to its extremities.

SECURIPAL'PI, Ent., Lat., *securis*, a hatchet, and *palpi*, feelers. A Family of coleopterous Insects, so called because their palpi have a hatchet-like termination.

SECURIF'ERA, Ent., Lat., *securifer*, a hatchet-bearer. The first Family of hymenopterous Insects, so called from the form of the ovipositor, which, although serrated in some genera, in others is salient like a hatchet, or rather like a hedge-bill.

SEG'MENT, Geom., Lat., *secare*, to cut. The segment of a circle is the space contained between an arc and its chord.

SELA'CHIANS, Icth., Gr., σελαχος (*selachos*), from σελας (*selas*), a flash of light, and χεω (*cheō*), to diffuse. A term applied to the Plagiostoma or the first Family of Cartilaginous Fishes; so called because, according to Aristotle, most of them diffuse a phosphorescent light. The *Sharks*, *Rays*, &c.

SELE'NIUM, Chem., Gr., Σεληrη (*Selene*), the Moon. An element discovered by Berzelius in 1817, and thus named on account of its analogy to another element, *Tellurium;* so called from *Tellus*, the Earth. It exists in ores of copper, silver, lead, &c., but in very minute quantities.

SELEN'OSTAT, Ast., Gr., Σεληνη (*Selene*), the Moon, and στατικος (*statikos*), that arrests. An Instrument used for observations on the Moon.

SELLA-TUR'CICA, Anat., *sella*, a seat or saddle, and *Turcica*, Turkish. A Fossa, so called, on the superior surface of the sphenoidal bone. It is bounded by the four clinoid processes.

SENSA'TION, Phys., Lat., *sensatio* (from *sentire*, to feel), feeling. The perception by the brain of any impression made on the organs of the senses.

SENSIBIL'ITY, Phys., see *Sensation*. A property of all parts of living animal bodies which renders them susceptible of impressions, not of feeling them, for that, or *sensation*, lies in the brain only.

SE'PAL, Bot., Lat., *sepes*, a hedge, an inclosure. Each of the component parts, or leaves, of the calyx of a flower.

SEPTICI'DAL, Bot., Lat., *septum*, a partition, and *cædere*, to split or divide. That sort of dehiscence in which the pericarp splits through the dissepiments.

SEP'TUM, Anat., Lat., *septum*, a partition. Any part which separates one cavity from another. Such is the *Septum narium*, &c.

SERI'CEOUS, Bot., Lat., *sericerus*, made of silk. Silky.

SE'ROUS, Anat., see *Serum.* Relating to Serum, as the *Serous membranes*, &c.

SER'PENTINE, Min., see *Ophite.*

SERRACOR'NUA, Ent., Lat., *serra*, a saw, and *cornu*, a horn or antennæ. The third Family of pentamerous Coleoptera, so called because their antennæ are serrate or notched at the end, like a saw.

SER'RATED, Anat., Lat., *serratus*, toothed, like a saw. Applied to Sutures formed by the interlocking of the projections and indentations of the articular surfaces of the bones. The *Sagittal, Lambdoidal, Coronal*, &c., are all examples.

SERRA'TUS, Anat., Lat., *serra*, a saw. Muscles so called from their appearance—the *S. anticus, S. posticus*, &c.

SE'RUM, Anat., Lat., *serum*, whey. The thin, aqueous portion of the blood that separates from the clot on cooling.

SES'AMOID, Anat., Gr., Σεσαμη (*Sesame*), a Sesamum seed, and ειδος (*eidos*), shape. Small obround Bones, so called, situated in the tendons of the flexor muscles, usually in those of the fingers and toes only, and generally confined to those of the thumb and great toe. The largest one is the *patella*, or knee pan.

SES'SILE, Bot., Lat., *sessilis*, having a broad base. A term applied to Leaves destitute of a petiole. It is also said of a flower in which the peduncle is wanting.

SETO'SE, Bot., Lat., *setosus*, beset with stiff hairs. Bristly.

SEX'TANT, Ast., Lat., *sextus* (Gr., ἑκτος), the sixth. An Astronomical Instrument graduated to 60°, or the sixth of 360°.

SEX'TILE, Ast., Lat., *sextilis*, the sixth. The relative position of two planets when 60°, or one-sixth of the Zodiac, apart.

SID'ERAL, Ast., Lat., *sidus*, a star. The sideral day is the time in which the Earth revolves once on its axis, or the time which any meridian of our planet occupies in revolving from any fixed star back again.

SIG'MOID, Anat., Gr., σιγμα (*sigma*), the Greek letter S, and ειδος (*eidos*), shape. A term applied in Anatomy to Fossa, Valves, and a Flexure of the colon.

SI'LEX, Min., Gr., χαλις (*chalis*), a pebble. An important Earth—the characteristic ingredient of rock crystal, quartz, &c., in which it is nearly pure.

SIL'ICON, Chem., Lat., *silex*, flint. One of the most abundant of all Elements, its oxide constituting sandstone, quartz, &c.

SILIQ'UE, Bot., Lat., *siliqua*, pod. A two-valved pod-shaped Capsule found only in cruciferous plants.

SILU'RIDÆ, Icth., Gr., Σιλουρος (*Silouros*), a Cat-fish. The Third Family of abdominal Malacopterygians, consisting of a variety of fishes, of which our common Cat-fish is a good type.

SILU'RIDES, same as above.

SI'NUS, Anat., Lat., *sinus*, an abyss, cavity. A term applied to various cavities and canals; such are the venous canals, called *Longitudinal* and *Lateral Sinuses*, &c.

SIPHONAP'TERA, Ent., σιφων (*siphōn*), a tube, α, priv., and πτερον (*pteron*), a wing. Wingless suckers. The fourth Order of Insects, so called because they are apterous and live by suction. It contains but one genus, *Pulex* or the Flea.

SIPHONOS'TOMA, Crust., Gr., σιφων (*siphōn*), a tube, and στομα (*stoma*), mouth. The second Order of the pæcilopodous Crustacea, so called because, in place of jaws which are wanting, we find a sucker or siphon.

SI'PHUNCLE, Mal., Gr., dimin., of σιφων (*siphōn*), a tube. A cylindrical canal or tube that passes through the partitions of multilocular shells.

SKEL'ETON, Anat., Gr., σκελετος (*skeletos*), dried. The bony articulated frame-work of vertebrated Animals.

SMILA'CEÆ, Bot., Gr., Σμιλαξ (*Smilax*), the Green-Briar. A natural Order of Plants.

SOLANA'CEÆ, Bot., Lat., *Solanum*, Night-shade. A natural Order of Plants. It contains numerous poisonous species, such as *Tobacco*, *Henbane*, and, on the other hand, the nutritious Potato, the stimulating Capsicum, &c.

SOL'STICE, Ast., Lat., *solstitium*, the solstice. The time when the Sun enters the tropical points, Cancer and Capricorn; the former is the summer, the latter the winter solstice.

SOMATOL'OGY, Gr., σωμα (*sōma*), body, and λογος (*logos*), a treatise. A better word than Anatomy, which is usually substituted for it.

SO'RUS, Bot., Gr., σωρος (*sōros*), a heap. A term applied to the thecæ of Ferns which collect in clusters on the back or margin of the leaves.

SPA'DIX, Bot., Lat., *spadix*, a palm branch. A spike enveloped by a large bract, as in the *Indian Turnip*.

SPAR, Min., Ger., *spath*. A term applied to certain crystallized Minerals which easily break into polished fragments. Hence also *spathose*, as applied to minerals that have a spar-like fracture.

SPATHE, Bot., Gr., σπαθη (*spathe*), a lance, or pike. A sheath-like Bract which contains a single flower, or a spadix.

SPAT'ULATE, Zool., Lat., *spathula*, a little spatula or ointment knife. Applied to parts long, flat, and wider at the end than the origin.

SPAT'ULATE, Bot., Gr., σπαθη (*spathe*), a spatula. In the form of the apothecary's knife, called a spatula.

SPE'CIES, Nat. Hist., Lat., *species*, a form. Organic beings descended one from the other, or from common parents, and which resemble the latter as closely as they resemble each other. See *Genus* and *Variety*.

SPEC'TRA, Ent., Lat., *spectrum*, a ghost. A Family of orthopterous Insects which have a long, slender body, resembling the very ghost of an insect.

SPEC'TRUM, Opt., Lat., *spectrum*, a spectre. A coloured, oblong image of the Sun, produced by the decomposition of its light by the prism.

SPEC'ULUM, Opt., Lat., *speculum*, a mirror. A term given to the *metallic* Reflector of astronomical instruments.

SPHE'NO, Anat., see *Sphenoid.* A contraction of sphenoid, frequently added to the names of other organs in the vicinity of the sphenoidal bone. Thus we have *Spheno-maxillary*, *Spheno-parietal*, &c.

SPHE'NOID, Anat., Gr., σφην (*sphen*), a wedge, and ειδος (*eidos*), shape. A bone of the Cranium, the *Os Sphenoides*, so called, not from its shape, but from the fact that it is inserted like a wedge between the bones of the cranium and those of the face.

SPHENOID'AL, Anat., see *Sphenoid.* Relating to the Sphenoid.

SPHERE, Geom., &c., Gr., σφαιρα (*sphaira*), a globe. A solid described by the revolutions of a semicircle about its diameter which is fixed, or a regular solid in which all lines drawn from the centre to the surface are equal.

SPHERID'IUM, Ent., Gr., σφαιριδιον (*sphairidion*), dimin., of σφαιρα (*sphaira*), a globe or sphere. A genus of Insects so called, from the globular form of the whole animal.

SPHE'ROID, Geom., Gr., σφαιρα (*sphaira*), sphere, and ειδος (*eidos*), form. A solid generated by the revolution of a semi-ellipsis about one of its axes, which remains fixed.

SPHEROM'ETER, Opt., Gr., σφαιρα (*sphaira*), and μετρον (*metron*), a measure. An Instrument for measuring the curve of lenses.

SPHINC'TER, Anat., Gr., σφιγγω (*sphiggō*), to tie, or constrict. A term applied to Muscles that close various passages by constriction.

SPIKE, Bot., Lat., *spica*, an ear of corn. Similar to a *raceme*, except that the flowers are destitute of pedicels, or are sessile.

SPI'NAL, Anat., see *Spine.* Relating to the Spine.

SPINE, Anat., Lat., *spina*, a thorn, or spine. Processes of bones compared to spines; also the whole vertebral column, so called from the numerous processes projecting from it like spines.

SPI'RACLES, Mam., Lat., *spiraculum*, an air-hole. A term applied to the *Nostrils* of Whales, which open on the top of the head, so that these animals can breathe without raising the whole of their huge head out of water.

SPIRE, Mal., Gr., σπειρα (*speira*), whorl, convolution. All the Whorls of univalve shells, except that in which the aperture is placed.

SPIRIGNA'THA, Ent., Gr., σπειρα (*speira*), spiral, and γναθος (*gnathos*), jaw. A modification of the maxilla, which, as in many lepidopterous insects, is converted into a filiform *ligula* or Tongue, acting as a siphon or sucker, and which, when at rest, is rolled up—ex., the *Hawk-moth* or *Sphynx*.

SPLANCH'NIC, Anat., Gr., σπλαγχνον (*splagchnon*), viscus. Relating to the Viscera, as *Splanchnic cavities* (cranium, thorax, abdomen), *S. nerves*, &c.

SPLANCHNOL'OGY, Anat., Gr., σπλαγχνον (*splagchnon*), viscus, and λογος (*logos*), a treatise. A treatise on the viscera.

SPLEEN, Anat., Gr., σπλην (*spleen*), spleen. An organ of which the use is unknown, but which is usually considered an imperfect Gland.

SPLEN'IC, Anat., see *Spleen*. Relating to the Spleen, as *Splenic artery*, *S. vein*, &c.

SPLE'NIUS, Anat., see *Spleen*. A Muscle so called, from its resemblance to the spleen of certain animals, situated on the back of the neck—the *Splenius capitis*, or *S. colli*.

SPON'GIOLES, Bot., Gr., σπογγια (*spoggia*), sponge. The points or fibres of growing roots, which are of recent tissue, and thus readily absorb fluids.

SPORAN'GIUM, Bot., Gr., σπορα (*spora*), seed, and αγγειον (*aggeion*), a vase. A case analogous to an ovary that contains the *spores* in acrogenous, or cryptogamous plants.

SPORES, Bot., Gr., σπορα (*spora*), seed. Bodies found in the Flowerless Plants, representing the seeds of the flowering plants, but differing from them in the absence of the *embryo*, and producing a root and stem from any part of their surface.

SPORID'IA, Bot., see *Spores*. Membranous capsules which contain the sporules of the Fungi.

SPOR'OGENS, Bot., Gr., σπορα (*spora*), seed, and γεννεω (*geneō*), to produce. A group of singular Plants of which the ovaries contain spores instead of seeds, notwithstanding which they produce flowers, one of which, the *Rafflesia*, is several feet in diameter.

SQUAM'OUS, Anat., Lat., *squama*, a scale. Thin, scale-like, a term applied to a Suture, and thin edges of bones.

SQUAMIPENNA'TÆ, Icth., Lat., *squama*, a scale, and *penna*, wing or fin. The sixth Family of acanthopterygious Fishes, so called because their dorsal and other fins are covered with scales.

STALAC'TITE, Min., Gr., σταλακτος (*stalaktos*), flowing by drops. A mineral deposit found in caverns, formed, according to Liebig, by rain water containing carbonic acid, which penetrates limestone, dissolves a portion of it, and, after losing by evaporation a portion of the carbonic acid, deposits the calcareous matter and forms stalactite.

STALAG'MITE, Min., see *Stalactite.* Stalactitic matter deposited in mammillated masses.

STA'MENS, Bot., Lat., *stamen*, a thread. Filiform bodies supporting an anther, situated between the petals and the pistil. The fertilizing Organs of a plant.

STAPE'DIUS, Anat., see *Stapes.* A little Muscle situated in the tympanum of the ear, and which draws the stapes outwards.

STA'PES, Anat., Lat., *stapes*, or *stapia*, a stirrup. The last of the four Bones of the tympanal chain, so called from its shape, which is precisely that of a stirrup.

STAT'ICS, Nat. Ph., Gr., στατικος (*statikos*), arresting. That science which treats of the forces that produce equilibrium.

STEAR'IC, Chem., Gr., στεαρ (*stear*), suet. An Acid, so called, obtained from suet, crystallizing in white, soft, brilliant needles.

STE'ARINE, Chem., Gr., στεαρ (*stear*), suet. The essential part of all sorts of suet; it may be obtained from it in white pearly plates.

STE'ATITE, Min., Gr., στεαρ (*stear*), tallow. Soapstone; so called from the unctuous or soapy feeling it conveys to the touch

STEL'LATE, Bot., Lat., *stellatus*, strewn with stars. Arranged in star-shaped whorls.

STENELY'TRA, Ent., Gr., στενος (*stenos*), narrow, and ελυτρον (*elutron*), elytron. A Family of coleopterous Insects, so called because their elytra or wing-cases become narrowed at the ends.

STEREOM'ETRY, Geom., Gr., στερεος (*stereos*), solid, and μετρον (*metron*), measure. That branch of Geometry which treats of the measurement of Solids.

STERIN'EA, Min., Gr., στερεος (*stereos*), solid. The second Order of the first Class of Minerals.

STER'NO, Anat., see *Sternum.* A contraction of sternum, frequently prefixed to names of other organs relating to that bone, as to the muscles, *Sterno-cleido-mastoideus*, *Sterno-hyoideus*, &c.

STER'NUM, Anat., Gr., στερνον (*sternon*), the breast-bone. An azygous, long, flat Bone articulated with the clavicles and costal cartilages.

STIG'MA, Bot., Gr., στιγμα (*stigma*), a mark, brand. The apex of the style, a point, knob, &c.

STIG'MATA, Ent., Gr., στιγματα (*stigmata*)—from στιζω (*stizo*), to prick)—marks. The name usually applied to the pneumostoma (q. v.) of Insects. An insignificant word which should be abandoned.

STIPE, Bot., Lat., *stipes*, a stalk. The internode in the form of a stalk to the gynœcium of certain flowers.

STIP'ULE, Bot. Lat., *stipula*, a straw. Small leaf-like bodies on each side of the base of the petiole.

STO'LON, Bot., Gr., στελλω (*stellō*), to send forth. A branch from a stem above ground that descends into the earth, takes root, and becomes an independent plant.

STOM'ACH, Anat., Gr., στομαχος (*stomachos*), an organ for the reception of food.

STOMAP'ODA, Crust., Gr., στομα (*stoma*), mouth, and πους (*pous*), foot. The second Order of decapodous Crustacea, so called because their foot-jaws approximate to the mouth.

STOM'ATA, Bot., Gr., στομα (*stoma*), a mouth. Minute oval Apertures in the epidermis of the leaves and green parts of plants, communicating with cavities in the parenchyma. They regulate, by a valvular apparatus, evaporation and respiration.

STRA'TUM, Geol., Lat., *stratum*, a layer, any thing spread out or strewed (as sand) over any surface. A term applied by Geologists to similar arrangements of Rocks, Sand, &c.

STRI'ATE, Bot., Lat., *striatus*, striped. Marked with longitudinal lines.

STROB'ILE, Bot., Lat., *strobilus* (Gr., στροβεω, to twist), a pine-cone. The collective fruit of the Coniferæ, each scale of the cone representing a carpel.

STRON'TIUM, Chem., *Strontian*, a mining village in Argyleshire. A white Metal, very similar to barium, and obtained from its carbonate, *strontia*, or *strontian*.

STROPH'IOLE, Bot., Lat., *strophus*, a little ring, or thong. An appendage to the hilum of a seed.

STRYCH'NINE, Chem., Gr., Στρυχνος (*Struchnos*), a plant so called, probably an Apocynum. An Alkaloid extracted from the seeds of the *S. nux vomica*, in the form of minute crystals. A deadly poison.

STYLE, Bot., Lat., *stylus* (Gr., στυλος), a sort of pencil, or pointed instrument, used by the ancients to write on tablets of wax. The columnar portion of the Ovary having the stigma on its extremity.

STY'LO, Anat., see *Styloid*. A word frequently added to the names of organs connected with styloid processes. Thus we have *Stylo-glossus*, *Stylo-hyoideus*, &c.

STY'LOID, Anat., Gr., στυλος (*stulos*), an ancient stylos or pen, and ειδος (*eidos*), shape. A term applied to slender and pointed Processes.

STY'LOPS, Ent., Gr., στυλος (*stulos*), a pedicle, and ωψ (*ōps*), eye. One of the two genera of singular Insects composing Latreille's Order of the Rhipiptera; so called from the large eyes being placed on a style or pedicle. Like the Xenos, q. v., it is parasitical.

SUBCLA'VIAN, Anat., Lat., *sub*, beneath, and *clavis*, clavicle. Parts situated under the clavicle, such as the *Subclavian arteries*, &c.

SUBCUTA'NEOUS, Anat., Lat., *sub*, under, and *cutis*, skin. Parts beneath the skin, as the *Subcutaneous cellular tissue*, &c.

SUBERO'SE, Bot., Lat., *suber*, cork. Cork-like in texture.

SUBLIMA'TION, Chem., Lat., *sublimare*, to soar. A chemical operation by which volatile substances are separated from other matters by heat, and condensed in the upper part of the apparatus.

SUBLIN'GUAL, Anat., Lat., *sub*, under, and *lingua*, the tongue. Parts situated beneath the tongue.

SUBMAX'ILLARY, Anat., Lat., *sub*, under, and *maxilla*, the jaw. Parts situated beneath the jaw, such as the *Submaxillary glands*, &c.

SUBOPER'CULUM, Icth., Lat., *sub*, under, and *operculum*, a lid. The most inferior of the three pieces composing the operculum or gill-cover of fishes.

SUB-SALTS, Chem., see *Salts*, and *sub*, implying inferiority. *Salts* are capable of combining with a certain quantity of water, *sub-salts* have a fixed metallic oxide in place of the water, called water of crystallization.

SUBSCAP'ULAR, Anat., *sub*, under, and *scapula*, the shoulder-blade. Organs under the scapula.

SU'BULATE, Ent., Lat., *subula*, an awl. Any organ shaped like an awl; usually applied to the antennæ.

SU'BULATE, Bot., Lat., *subula*, an awl. Awl-shaped, having a broad base and tapering to a point.

SUDORIF'EROUS, Anat., Lat., *sudor*, sweat, and *fero*, I carry. Applied to Glands which secrete the sweat, and to their ducts.

SUL'CATE, Bot., Lat., *sulcatus*, furrowed. Grooved.

SUL'CUS, Anat., Lat., *sulcus*, a groove or furrow. A term applied to Grooves on bones, &c.

SUL'PHATES, Chem., see *Sulphur*. Salts of sulphuric acid.

SUL'PHITES, Chem., see *Sulphur.* Salts of sulphurous acid.

SUL'PHO, Chem., see *Sulphur.* A prefix to names of certain acids, implying that they are sulphur-acids.

SUL'PHUR, Chem., Lat., *Sulphur*, (from Gr., ὅλον and πυρ,) all fire. An element exhaled from volcanoes, and found in combination with metals and in animal matter, particularly in albumen.

SUL'PHUR-AÇ'IDS, Chem., see *Sulphur* and *Acid.* A class of acids in which sulphur is united with the other elements in place of oxygen.

SULPHU'RIC, Chem., see *Sulphur.* An Acid, commonly called Oil of Vitriol, obtained from Sulphur.

SUL'PHUROUS, Chem., see *Sulphur.* An acid resembling the sulphuric, (and obtained from it, or sulphur,) but having less oxygen.

SUPERFI'CIES, Geom., Lat., *superficies*—the surface. That which has length and breadth only, its bounds being lines.

SUPINA'TION, Phys., Lat., *supinus*, lying on the back. One of the motions of the hand, the reverse of *pronation.* Hence the muscles which produce it are called *Supinators.*

SU'PRA, Anat., Lat., *supra*, above, over. A common prefix to various organs, indicative of their position.

SURCULO'SE, Bot., Lat., *surculus*, a sucker. Producing numerous Suckers.

SU'TURE, Anat., Lat., *sutura*, a seam. An immovable Articulation between bones, the line of junction appearing like a seam.

SY'ENITE, Min., from *Syene* in Egypt, whence the Romans obtained it for their buildings. A granitic Rock in which hornblende replaces the mica of Granite, properly so called.

SYMPIESOM'ETER, Nat. Ph., Gr., συμπιεζω (*sumpiezō*), I compress, and μετρον (*metron*), measure. An instrument (usually called by seamen a Sympsometer) contrived by Mr. Adie, of Edinburgh, for measuring the weight of the atmosphere by the compression of a column of gas. A more valuable, because a more impressible instrument than the common barometer.

SYNARTHRO'DIAL, Anat., Gr., συν (*sun*), with, and αρθρωσις (*arthrōsis*), articulation. An immovable articulation, which may be either by ***Suture***, ***Harmony***, or ***Gomphosis***, q. v.

SYNCAR'POUS, Bot., Gr., συν (*sun*), together, or united, and καρπος (*karpos*), fruit. A term expressive of the union of the pistils, or a compound pistil.

SYNCHONDRO'SIS, Anat., Gr., συν (*sun*), with, and χονδρος (*chondros*), cartilage. Articulation of bones through the medium of cartilage, as that of the ribs and sternum.

SYN'CHRONOUS, Phys., Gr., συν (*sun*), with, and χρονος (*chronos*), time. Occurring at the same instant.

SYNCLI'NAL, Geol., Gr., συν (*sun*), with, and κλινω (*klinō*), to lean. An imaginary line drawn with another called the *Anticlinal*. A line drawn along the ridge or crest of a roof of one of a row of houses, the eves of which come in contact, will be anticlinal—another along the eves will be synclinal. See *Anticlinal.*

SYNDAC'TYLOUS, Orn., Gr., συν (*sun*), together, and δακτυλος (*daktulos*), toe. A term applied to the second division of Passerines, because the external toe of these birds is nearly as long as the middle one, and is united with it as far as the penultimate joint. It contains the ***Bee-Eaters***, ***King-Fishers***, &c.

SYNDESMOL'OGY, Anat., Gr., συνδεσμος (*sundesmos*), ligament, and λογος (*logos*), a treatise. That branch of Anatomy which treats of the Ligaments.

SYNDESMO'SIS, Anat., Gr., συνδεσμος (*sundesmos*), ligament. A mode of articulation by ligaments, such as that of the radius with the ulna.

SYNGENE'SIOUS, Bot., Gr., συν (*sun*), with, and γινομαι (*ginomai*), to be born. Plants of which the filaments are distinct or separate, and the anthers united into a ring.

SYNO'VIA, Anat., Gr., συν (*sun*), with, and ωον (*ōon*), egg. A word invented by Paracelsus, expressive of the resemblance of the fluid found in the synovial sacs to white of egg.

SYNTENO'SIS, Anat., Gr., *συν* (*sun*), with, and *τενων* (*tenōn*), a tendon. A mode of articulation by Tendon, as that of the petella with the tibia.

SYN'THESIS, Chem., Gr., *συν* (*sun*), with, and *τιθημι* (*tithemi*), I place. The reverse of Analysis. A method of proving the truth of an analysis by putting in contact the elements obtained by the latter, and thus recomposing the body analyzed.

SY'PHON, Nat. Ph., Gr., *σιφων* (*siphōn*), a tube. A bent tube, one limb of which is longer than the other, used for transferring liquids from one vessel to another.

SYSSARCO'SIS, Anat., Gr., *συν* (*sun*), with, and *σαρξ* (*sarx*), flesh. The connection of bones by muscles.

SYS'TEM, Anat., Gr., *συστημα* (*sustema*), an assemblage. The aggregate of organs of a similar kind. Thus the bones form the osseous, the muscles, the muscular, the nerves, the nervous system, &c.

SYS'TEM, Nat. Hist., same etym. A great catalogue in which bodies are recognised by distinct characters, are entered by names universally acceded to, and arranged in divisions and sub-divisions, themselves named and characterized, where they may be found. A sort of dictionary where we proceed from the characters of a body to find out the name.

SYS'TOLE, Anat., Gr., *συστολη* (*sustole*), contraction. The contraction of the heart, the reverse of *Diastole*.

SYZ'YGY, Ast., Gr., *συζυγια* (*suzugia*), conjunction. The conjunction or opposition of a planet with the Sun.

TABANI'DES, Ent., Lat., *Tabanus*, the Horse-Fly. The second Family of dipterous Insects.

TAB'ULA, Anat., Lat., *tabula*, a plate of any thing, a surface. Applied to the layers of the compact substance of the walls of the Cranium, called inner and outer tables, the former also called *Tabula vitrea.*

TACHOM'ETER, Nat. Ph., Gr., ταχος (*tachos*), speed, and μετρον (*metron*), measure. An instrument for determining the velocity of a machine, or minute variations of that velocity.

TACHYDRO'MOUS, Zool., Gr., ταχυς (*tachus*), swift, and δρομος (*dromos*), course, or race. A term variously applied by different authors—by one to a Family of *Birds*, by a second to a Family of *Reptiles*, and by a third to a Family of dipterous *Insects.*

TAC'TION, Geom., Lat., *tango*, I touch. Synonymous with Tangency.

TÆNIOI'DES, Rad., Gr., ταινια (*tainia*), a riband, and ειδος (*eidos*), form. The third Family of the Entozoa, or Intestinal Worms. It includes the Tænia or *Tape-worms.*

TALC, Min., Ger., *talc.* A magnesian, foliated Mineral, soapy to the touch, used for tracing lines on cloth, &c.

TAN'GENT, Geom., Lat., *tangens*, touching. A straight line which meets or touches a curve line without intersecting it.

TAN'NIN, Chem., Fr., *tanner*, to tan. A peculiar principle obtained chiefly from the bark of the Oak, but very common in many plants ; so called from being the chief agent in tanning or converting hides into leather.

TANYSTO'MA, Ent., Gr., τεινω (*teinō*), I stretch, and στομα (*stoma*), a mouth. The second Family of dipterous Insects, so called from the projection of the proboscis, which in some is very long.

TAPE'TUM, Anat., ταπης (*tapes*), a covering, tapestry. A brilliant spot, external to the optic nerve, on the choroides of certain animals, produced by the absence of the pigmentum nigrum, thus converting that portion of the membrane into a concave mirror. It enables the animal to see in dark places. It is found in the *Cats*, &c.

TARDIGRA'DA, Mam., Lat., *tardus*, slow, and *gradior*, I move. A Tribe of edentated Mammalia, so called from the slowness of their motions. It includes the *Sloths*, *Armadillos*, &c.

TAR'SAL, Anat., see *Tarsus*. Relating to the Tarsus, or organs connected with it, as *tarsal ligaments*, *tarso-metatarsal articulations*, &c.

TAR'SUS, Anat., Gr., ταρσος (*tarsos*), a hurdle, or grating. The eight bones of the posterior part of the foot, called the *Astragalus*, *Calcis*, *Naviculare*, 1, 2, 3, *Cuneiformes*, and the *Cuboides*.

TAR'SUS, Ent., Gr., same etym. The whole foot of Insects, the last articulation of which is *usually* armed with hooks or claws.

TARTAR'IC, Chem., Gr., ταρταρος (*tartaros*), infernal. An acid so called, because it is obtained from *Tartar*, or a bitartrate of potash, which is formed from the dregs of wine.

TAX'ICORNS, Ent., Lat., *Taxus*, a Yew-tree, and *cornu*, a horn. The second Family of heteromerous Coleoptera, so called because their antennæ increase in size, or terminate in an inflation.

TAX'IDERMY, Zool., Gr., ταξις (*taxis*), arrangement, and δερμα (*derma*), the skin. The art of preparing, or *setting up* specimens of animals for the cabinet.

TAX'IDERMIST, Zool., see *Taxidermy*. One who practises the art of preparing specimens of animals for the cabinet.

TECTIBRANCHIA'TA, Mal., Lat., *textus*, covered, and *branchiæ*, gills. The fourth Order of the gasteropodous Mollusca, so called because their branchiæ are covered by the mantle.

TECTRI'CES, Orn., Lat., *tego*, I cover. A term applied to the *Coverts* or those feathers of Birds which cover the feathers of the wings.

TEG'MEN, Bot., Lat., *tegmen*, a covering. The inner membrane of the seed of a plant.

TEGMEN'TA, Bot., Lat., *tegmentum*, a roof, or cover. Applied to the Scales covering the leaf-buds of deciduous trees.

TEI'NOSCOPE, Opt., Gr., τεινω (*teinō*), to increase or extend, and σκοπεω (*skopeō*), I see. An Instrument, invented by Brewster and consisting of *prisms*, so combined that the aberration of refrangibility is corrected and the linear dimensions of objects increased or diminished.

TEL'EGRAPH, Gr., τηλε (*tele*), far, and γραφω (*graphō*), I write, literally, which writes from a distance. An ancient invention, in which fires, flags, &c., were employed, lately revived and perfected by the application of the magnetic fluid.

TELLU'RIUM, Chem., Lat., *Tellus*, the Earth. A name given by Klaproth, who first described it as a new metal. It is silver-white, brilliant, and has a rhombohedral form of crystallization. It is found combined with ores of gold, silver, lead, and bismuth.

TEN'DON, Anat., Gr., τεινω (*teinō*), I stretch. A round or flattened, inelastic cord attached to muscles, and which serves to connect them with the bones, as, for instance, the *tendo Achillis*.

TEN'DRIL, Bot., Lat., *tenere*, to seize or hold. The peduncle of an undeveloped inflorescence converted into a clasper or tendril, as in the vine.

TEN'SOR, Anat., Lat., *tendere*, to stretch. A term applied to Muscles, such as the *Tensor palati*, *Tensor tarsi*, &c.

TENTAC'ULA, Zool., Lat., *tentare*, to grope. Slender, elongated appendages to many of the lower animals; organs of touch and prehensility, very common in the Radiata.

TENTO'RIUM, Anat., Lat., *tentorium*, a tent. A process of the *dura mater* which separates the cerebrum and cerebellum.

TENUIROS'TRATÆ, Orn., Lat., *tenuis*, slender, and *rostrum*, a bill. The fourth Family of passerine Birds, so called from their long and slender bills. The *Tenuirostres* of Cuvier.

TERATOL'OGY, Phys., Gr., τερας (*teras*), a monster, and λογος (*logos*), a treatise. That branch of Physiology which treats of monsters, animal and vegetable.

TE'RES, Anat., Lat., *teres*, cylindrical, long, and round. A name applied to a ligament, the *ligamentum teres*, which ties the head of the femur to the bottom of the acetabulum.

TERE'TE, Bot., Lat., *teres*, round. Applied to Stems, &c.

TERMINOL'OGY, Nat. Hist., Gr., τερμα (*terma*), a word peculiar to an art or science, and λογος (*logos*), a treatise. Synonymous with *Nomenclature*, or the science of terms or names.

TERMI'TES,* Ent., Lat., *termes*, branch of a tree. A group of neuropterous Insects, well known as *White Ants*, and by the appalling destruction they effect in intertropical countries.

TES'SELATED, Mal., Lat., *tesselatus*, checkered. Divided into squares like a chess-board.

TES'TA, Bot., Lat., *testa*, a shell. The Integuments of a seed.

TESTA'CEOUS, Mal., Lat., *testaceus*, furnished with a shell. Applied to such of the Mollusca as are protected by a shell, either bivalve, univalve, or multivalve.

TETRADYNA'MIA, Bot., Gr., τετταρα (*tettara*), four, and δυναμις (*dunamis*), power. The fifteenth Class of Plants, according to Linnæus; so called because four of the stamens are long and equal, and two are shorter and exterior, thus giving a power or superiority of two. Flowers thus formed are called *tetradynamous*.

TET'RAGON, Geom., Gr., τετταρα (*tettara*), four, and γωνια (*gōnia*), angle. A figure having four angles.

TETRAGYN'IA, Bot., Gr., τετταρα (*tettara*), four, and γυνη (*gune*), female. The fourth Order of the first thirteen Linnæan classes; so called because the flowers have four styles; hence the term of *tetragynous*, or four-styled flowers.

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* Should not this be written TARMITES, from Lat., *tarmes*, a worm that perforated and destroyed wood?

TETRAM'ERA, Ent., Gr., τετταρα (*tettara*), four, and μερις (*meris*), piece. The third general section of the Coleoptera in which the tarsi are quadriarticulated, or have four joints.

TETRAM'EROUS, Bot., Gr., τετταρα (*tettara*), four, and μερις (*meris*), a part. A whorl of four parts.

TETRAN'DROUS, Bot., Gr., τετταρα (*tettara*), four, and ανηρ (*aner*), male. Applied to Flowers with four Stamens.

THAL'AMI, Anat., Gr., θαλαμος (*thalamos*), a bed. The spots from which nerves were (supposed) to originate. This term is usually, however, restricted to obround masses which give origin to the second pair.

THAL'AMUS, Bot., Gr., θαλαμος (*thalamos*), a bed. The part on which the ovary is placed—the Receptacle of the fruit of some Botanists.

THAL'LOGENS, Bot., Gr., θαλλω (*thallō*), to sprout, and γενναω (*gennaō*), to produce. Flowerless plants, without stems, roots, or leaves ; hence also called *Thallophytes.*

THAL'LUS, Bot., Gr., θαλλω (*thallō*), to sprout. A flat expansion of the homogenous tissue of Flowerless Plants, containing the spores, the only approach to a leaf which Thallophytes exhibit.

THE'CA, Bot., Gr., θηκη (*theke*), a sheath. Synonymous with *Sporangium*, a case containing the spores of acrogenous plants.

THECOS'TOMES, Ent., Gr., θηκη (*theke*), a sheath, and στομα (*stoma*), mouth. A term applied by Latreille to Insects in which the sucking apparatus is enclosed in a sheath.

THEOD'OLITE, Geom., Gr., θεαομαι (*theaomai*), I view, and δολος (*dolos*), stratagem. An Instrument for measuring the angular distances between objects projected on the plane of the horizon ; so called because the horizontal angles are measured at once, and thereby all previous calculation and observation of altitudes (necessary steps where a sextant is employed) are altogether unnecessary.

THE'OREM, Geom., Gr., θεωρημα (*theōrema*), that which one considers or contemplates. A purely speculative proposition, the truth of which needs demonstration.

THE'ORY, Gr., *θεωρεω* (*theōreō*), to contemplate. The speculative parts of a science founded, however, on nature or rigid deductions from facts.

THER'MAL, Geol., Gr., *θερμος* (*thermos*), warm, or hot. Applied chiefly to warm Mineral Waters.

THER'MO-ELECTRIÇ'ITY, Nat. Ph., Gr., *θερμος* (*thermos*), hot, and *ηλεκτρον* (*elektron*), amber, or electricity. Electricity established in metals by disturbing the equilibrium of their temperature.

THERMOM'ETER, Chem., Gr., *θερμος* (*thermos*), hot, and *μετρον* (*metron*), measure. An Instrument for measuring degrees of temperature.

THER'MOSTAT, Nat. Ph., Gr., *θερμος* (*thermos*), hot, and *ιστημι* (*histemi*), I stand. A self-acting Instrument for regulating heat.

THEU'NEA, Min., Gr., *Θειον* (*theion*), Sulphur. The twelfth Order of the second Class of Minerals.

THORAÇ'IC, Anat., see *Thorax*. Relating to the Thorax, as thoracic viscera, arteries, &c.

THO'RAX, Anat., Gr., *θωραξ* (*thōrax*), a coat of mail, because it protects the heart and lungs, or, according to Morin, from *θορεω* (*thoreō*), to pulsate, because the heart is always beating against the ribs. A conoidal cavity bounded by the dorsal vertebræ, sternum, ribs, and costal cartilages.

THO'RIUM, Chem., *Thor*, the Scandinavian God. A heavy, gray Metal, obtained from Thorina, an earthy substance discovered by Berzelius in a Norwegian mineral called Thorite.

THYMELEA'CEÆ, Bot., Lat., *Thymelæa*, a plant so called by the Latins. A natural Order of Plants.

THY'MUS, Anat., *Θυμος* (*Thumos*), Thyme. An imperfect Gland, so called from some fancied resemblance in form to the flower of the Thyme. It is situated in the superior portion of the anterior mediastinun. Its use is unknown.

THY'ROID, Anat., Gr., *θυρεος* (*thureos*), a shield or buckler. The largest of the cartilages of the larynx, so called because the ancient anatomists found some resemblance between it and a buckler, either in form or function. Hence we have *thyreo-arytenoid, thyroid arteries*, &c. &c.

THYR'SUS, Bot., Gr., Θυρσος (*Thursos*), a javelin or wand ornamented with ivy, used in the feasts of Bacchus. A compound and somewhat pyramidal *Panicle*, narrowed at the base.

THYSANOU'RA, Ent., Gr., θυσανος (*thusanos*), hair, and ουρα (*oura*), the tail. The second Order of Insects, so called because each side of the end of the abdomen (tail) is furnished with hair-like organs of motion.

TIB'IA, Anat., Lat., *tibia*, a pipe or flute. The shin Bone. The principal of the two bones of the leg, connecting the femur with the tarsus.

TIB'IA, Anat., see *Tibia*. Relating to the Tibia, as *Tibial arteries*, &c.

TILIA'CEÆ, Bot., Lat., *Tilia*, the Linden. A natural Order of Plants.

TIS'SUE, Anat., Bot., Lat., *textus*, woven, intertwined. The various anatomical elements which, by their union, form organs, animal or vegetable.

TITA'NIUM, Chem., Lat., *Titan*, Titan, thus named from its refractory or stubborn nature. A Metal so called, the crystals of which are harder than quartz. The most intense heat of a wind furnace will not fuse it, and no acid, except a mixture of the nitric and hydrofluoric, will act upon it.

TOISE, Fr., *toise*, a measure of length. Six feet, a fathom.

TOMENTO'SE, Bot., Lat., *tomentum*, flock, wool, &c. Furnished with a dense covering of short, woolly hairs.

TON'SIL, Anat., Lat., *tonsillæ*, tonsils. Amygdaloid, glandular bodies situated between the lateral half arches of the soft palate or velum palati. They are a collection of muciparous follicles.

TORCULA'RIUM, or **TOR'CULAR**, Anat., Lat., *torcular*, a wine-press. The *Torcular Hierophili*, or wine-press of Hierophilus, is a term applied to a smooth space at the junction of several sinuses of the head.

TORO'SE, Mal., Lat., *torus*, a round projection, or moulding. Swelling into knobs.

TO'RUS, Bot., Lat., *torus*, a cord. The apex of the peduncle of a Flower, to which the different parts of the flower are attached.

TOTIPALMA'TÆ, Orn., Lat., *totus*, all, and *palma*, palm. The third Family of the Palmipedes, so called because *all* the toes are united by a web, thus rendering the feet of these birds complete oars. It contains the *Ducks*, &c.

TOUR'MALINE, Min., Fr., *tourmaline*. The more perfect forms of schorl. It is said to be the *Lyncurium* of the ancients. It forms transparent and coloured crystals consisting chiefly of silica and alumina.

TRACHE'A, Anat., Gr., τραχεια (*tracheia*), from τραχυς (*trachus*), rough, and αρτηρια (*arteria*), air-tube. The windpipe, of which the ramifications are called *Bronchi*. A cylindrical tube which conveys air from the larynx to the bronchi.

TRACHEA'RIÆ, Ent., Gr., τραχεια (*tracheia*), air-tube. The second Order of the Arachnids, so called because they respire by means of ramified tracheæ that receive air by two pneumostoma, or air-mouths.

TRACHELY'DES, Ent., Gr., τραχηλος (*trachelos*), neck. The fourth Family of heteromerous Coleoptera, so called because all these insects have the head supported on a sort of neck.

TRA'CHYTE, Min., Gr., τραχυς (*trachus*), rough. A variety of lava, sometimes porphyritic, then basaltic, &c.

TRAC'TORY, Geom., Lat., *traho*, I draw. A curve of which the tangent is always equal to a given line.

TRA'GUS, Anat., Gr., Τραγος (*Tragos*), a Goat. A little triangular Process of the pavilion of the Ear situated before the external auditory meatus. It is so called from a small tuft of hairs resembling the beard of a Goat, which is usually found there in man after the forty-fifth year.

TRAJEC'TORY, Nat. Ph., Lat., *trajectare*, to pass from one point to another. A term applied in Dynamics to the path or line described by a projectile.

TRAN'SIT, Ast., Lat., *transitio*, passage. The passing of one planet before or over the disc of another planet or star, or over the meridian.

TRANSUDA'TION, Phys., Lat., *trans*, through, and *sudo*, I sweat. The oozing of fluids through porous bodies of any description, membranes particularly.

TRAP, Geol., Sw., *trappa*, steps. Rocks of igneous origin, so called because they frequently occur in large flat masses rising one above another, like the steps of a staircase.

TRAPE'ZIUM, Anat., Geom., &c., Gr., τραπεζα (*trapeza*), from, τετρα (*tetra*), four, and πεζα (*peza*), foot. Applied by analogy to the first of the second row of carpal Bones, the one that supports the thumb. In Geometry, a rectilineal figure with four unequal sides, two of which are parallel.

TRAPE'ZIUS, Anat., see *Trapezium*. A muscle, trapezoidal in shape, situated on the back of the neck, extending from the superior transverse ridge of the occipital bone to the spinous process of the last dorsal vertebra, and thence to the spine of the scapula.

TRAPEZOI'DES, Anat., Gr., τραπεζα (*trapeza*), a table, and ειδος (*eidos*), form. The second Bone of the second row of carpals, the next to the trapezium.

TRAV'ERTIN, Min., It., *Travertino*, also called *Tiburtina*, from its being formed in great quantity by the river Anio at Tibur. A Limestone deposited from water containing carbonate of lime in solution.

TREMADO'TEA, Rad., Gr., τρημα (*trema*), a cavity, and δως (*dōs*), gift, or dower. The second Family of the parenchymatous Entozoa, so called because they are furnished with cavernous organs resembling cupping-glasses, by which they adhere to the viscera.

TRIAN'DRIA, Bot., Gr., τρεις (*treis*), three, and ανηρ (*aner*), male. The third Class of Plants, according to the Linnæan system, so called because the flowers have three stamens.

TRIAN'DROUS, Bot., see *Triandria*. Having three stamens.

TRI'ANGLE, Geom., Gr., τρεις (*treis*), three, and αγκυλος (*agkulos*), hooked, or cornered. A plane Figure bounded by three right lines.

TRIAN'GULAR, Geom., see *Triangle*. Having three angles.

TRIBOM'ETER, Nat. Ph., Gr., τριβω (*tribō*), to rub, and μετρον (*metron*), measure. An instrument invented by Musschenbroek to measure friction.

TRI'CEPS, Anat., Lat., *triceps*, three-headed. A term applied to Muscles with three muscular fasciculi at one of the extremities, or their origin. Such are the *Triceps femoris*, *Triceps extensor cubiti*, &c.

TRICHOT'OMOUS, Bot., Gr., τριχα (*tricha*), triply, and τεμνω (*temnō*), to cut. Three-forked.

TRICOC'COUS, Bot., Gr., τρεις (*treis*), three, and κοκκος (*kokkos*), a seed. Applied to a Pericarp which splits into three indehiscent carpels.

TRICONTAHÆ'DRON, Min., Gr., τριακοντα (*triakonta*), thirty, and ἑδρα (*hedra*), a side or face. A term applied by Haüy to Crystals presenting a surface of thirty rhombs.

TRICUS'PID, Anat., Bot., Lat., *tris* (for *tres*), three, and *cuspis*, a point. That which has three points. Applied, in Anatomy, to the Valves between the right auricle and ventricle of the heart.

TRIDAC'TYLE, Zool., Gr., τρεις (*treis*), three, and δακτυλος (*daktulos*), finger or toe. Three-fingered or three-toed.

TRI'FID, Bot., Lat., *trifidus*, divided into three. Applied to three-lobed leaves.

TRIGAS'TRIC, Anat., Gr., τρεις (*treis*), three, and γαστηρ (*gaster*), belly. Applied to Muscles with three bodies, or, as they are usually, though vulgarly, called bellies.

TRIGEM'INI, Anat., Lat., *tris*, three, and *geminus*, a twin, or double. Three-fold. A term applied to the fifth pair of Nerves, so called because it consists of three large branches.

TRIG'ONAL, Geom., Gr., τρεις (*treis*), three, and γωνια (*gōnia*), angle. Having three angles.

TRIGONOM'ETRY, Geom., Gr., τριγωνον (*trigōnon*), triangle, and μετρον (*metron*), measure. That branch of Geometry which reveals the method of finding the unknown parts of a triangle by proceeding from those that are known.

TRIG'YNOUS, Bot., Gr., τρεις (*treis*), three, and γυνη (*gune*), female. Plants furnished with three Pistils.

TRIL'OBITES, Crust., Gr., τρεις (*treis*), three, and λοβος (*lobos*), lobe. A group of (extinct ?) fossil Crustacea, so called from two dorsal incisures which divide the animal into three lobes.

TRIM'ERA, Ent., Gr., τρεις (*treis*), three, and μερις (*meris*), piece. A division of Insects, the fourth section of Coleoptera; so called because their tarsi consist of but three articulations.

TRIM'EROUS, Bot., Gr., τρεις (*treis*), three, and μερις (*meris*), piece. A whorl of three parts.

TRINE, Ast., Gr., τρις (*tris*), thrice. The relative position of two planets apart, 120°, or one-third of the Zodiac.

TRIPIN'NATE, Bot., Lat., *tres*, three, and *penna*, feather. Applied to compound Leaves divided into three.

TRISPHLANCH'NIC, Anat., Gr., τρια (*tria*), three, and σπλαγχνον (*splagchnon*), viscus. That which relates to three sorts of viscera. Applied to the ganglionic system, or Great Sympathetic Nerve.

TRITOX'IDE, Chem., Gr., τρεις (*treis*), three, and οξυς (*oxus*), acid. Applied to Oxides containing three atoms of oxygen to one atom of base.

TROCHAN'TER, Anat., Gr., τροχαω (*trochaō*), I turn. A term applied to two Processes of the Femur, so called because muscles inserted into them rotate or turn the thigh.

TROCH'LEA, Anat., Gr., τροχαλια (*trochalia*), a pulley. A term applied to the cylindrical articulating surface between the condyles of the Humerus, and to a groove on the internal portion of the orbitar process of the *Os frontis*.

TRO'CHOID, Geom., Gr., τροχος (*trochos*), a wheel, and ειδος (*eidos*), form. The Curve described by any point in a wheel rolling straight forward on a horizontal plane—synonymous with *Cycloid*.

TROPÆOLA'CEÆ, Bot., Lat., *Tropæolum*, the Nasturtium. A natural Order of Plants.

TRO'PHI, Ent., τρεφω (*trephō*), I nourish. A generic term applied by Kirby to all the organs of manducation in Insects.

TROP'ICS, Ast., Gr., τροπικοι (*tropikoi*), from τρεπω (*trepō*), to turn. Two of the smaller circles of the sphere parallel to the equator, and 23° 28″ from it.

TU'BER, Anat., Bot., Lat., *tuber*, any short rounded root. In Anatomy, applied to various cerebral elevations; in Botany, to a greatly thickened portion of a subterranean branch containing latent buds—the potato is a tuber, and its *eyes* the buds.

TU'BERCLE, Anat., Lat., *tuberculum*, a little tuber. Applied to small obround processes of Bones; also to similar developments of cerebral matter.

TUBER'CULUM, Anat., see *Tubercle*. The *Tuberculum cinereum* is an obround mass of the cineritious substance of the brain at the top of the *Calamus scriptorius*.

TUBEROS'ITY, Anat., see *Tubercle*. A roughened obround process of a Bone serving to give insertion to muscles or ligaments.

TUBIP'ORA, Rad., Lat., *tubus*, a tube, and *porus*, a pore. A Family of radiated Animals which inhabit, separately, small tubes or elongated cylindrical cells, attached at base and secured by cross-bars.

TUBULA'RII, Rad., Lat., *tubulus*, a little tube. The first Family of the coralliferous Polypi, so called because they inhabit small tubes.

TUBULICO'LA, Rad., Lat., *tubus*, a tube, and *colo*, I inhabit. A Family of Polypi, inhabiting tubes, the axis of which is traversed by the gelatinous matter, and open at the sides or ends for the transmission of tentacula.

TU'FA, or **TUFF**, Min., It., *Tufo*, a volcanic rock composed of felspath. See *Peperino*.

TUNG'STEN, Chem., Sw., *tung sten*, heavy stone. A Metal of the colour and lustre of iron. Its name is expressive of its great density, its specific gravity being from 17.22 to 17.6.

TU'NIC, Anat., Lat., *tunica*, a coat, envelope. A name given to Membranes which envelop organs, such as the tunics of the eye, *Sclerotic*, &c.

TUNCA'TA, Mal., Lat., *tunica*, a garment worn next to the skin, under the toga. An Order of the Mollusca. It includes all those Acephala which have no shells.

TUR'BINATED, Anat., Mal., Lat., *turbo*, a top. The turbinated Bones are thin and rolled up, so as to form a point at one end. They are situated in the nasal meatus. The same term is applied, in Malacology, to Shells that are pear or top-shaped.

TURNERA'CEÆ, Bot., *Turner*, name of a Naturalist. A natural Order of Plants.

TWI'LIGHT, Ast., Ger., *zwielicht*, the faint light after sunset and before sunrise. It is occasioned by the reflection of light from the atmosphere.

TYM'PANUM, Anat., Gr., τυμπανον (*tumpanon*), a drum. A cavity which, with its contents, composes the middle Ear.

TYPHA'CEÆ, Bot., Gr., τιφα (*tipha*)—from τιφος (*tiphos*)—a marsh. The Cat-tail. A natural Order of Plants.

TYP'OLITE, Geol., Gr., τυπος (*tupos*), type or figure, and λιθος (*lithos*), stone. The figure of animals or plants found in rocks.

ULMA'CEÆ, Bot., Lat., *Ulmus*, the Elm. A natural Order of Plants.

UL'NA, Anat., Lat., *ulna* (Gr., ωλενη), the arm or elbow. One of the two bones of the fore-arm.

UM'BEL, Bot., Lat., *umbella*, a parasol. A peculiar species of inflorescence differing from a *corymb*, in having all the pedicels arising from the same point, like the wires of an umbrella. The Primrose affords an example.

UMBELLIF'ERÆ, Bot., Lat., *umbella*, umbel, and *ferre*, to bear. A natural Order of Plants, so called because their flowers form umbels. It contains the *Carrot*, *Hemlock*, *Parsnip*, &c.

UM'BO, Mal., Lat., *umbo* (Gr., αμβων), a knob. The rounded and inflated part of Bivalves which turns over the hinge.

UM'BONATE, Mal., see *Umbo.* Embossed with a knob in the centre.

UN'CIFORM, Anat., Lat., *uncus*, a hook, and *forma*, shape. The *Os unciforme*, or unciform bone, is the fourth or last bone of the second row of carpels, supporting the fourth and fifth metacarpals.

UN'CINATE, Bot., Lat., *uncus*, a hook. Hook-shaped.

UNDEC'AGON, Geom., Lat., *undecim*, eleven, and Gr., γωνια (*gōnia*), angle. A plane figure with eleven sides or angles.

UNGUIC'ULATED, Zool., Lat., *unguiculus*, a nail or claw, and *latus*, from *ferre*, to carry. Furnished with nails.

UN'GUIS, Anat., Lat., *unguis*, a nail. The *Os unguis* is a delicate, thin, small bone, placed near an emargination at the base of the nasal process of the superior maxillary. It closes the anterior portion of the ethnoid cells, and forms part of the ductus ad nasum.

UN'GULA, Geom., Lat., *ungula*, a hoof. A section of a solid by a plane oblique to the base.

UNGULA'TA, Mam., Lat., *ungula*, a hoof. All hoofed Mammalia.

UN'GULATE, Mal., Lat., *ungula*, a hoof. Shaped like the hoof of a Horse.

UN'GULATED, Mam., see *Ungulate.* Hoofed. Applied to those animals in which the nails completely envelop the toes, forming a hoof.

UNILOC'ULAR, Mal., Bot., Lat., *unus*, one, *loculus*, lodge, or chamber. Applied to Shells which are not separated into various cavities by septa. In Botany, to Seed-vessels similarly formed.

U'NIVALVE, Mal., Lat., *unus*, one, and *valvæ*, a folding door. Testaceous Mollusca, in which the shell consists of a single piece or valve. The Cones, Conchs, Snails, Cypreæ, &c., are all univalves.

URA'NIUM, Chem., Gr., Ουρανος (*Ouranos*), the Heavens, or from *Urania*, one of the Muses. A Metal derived from *pitchblende*. It crystallizes in little regular octahedrons of a brilliant metallic lustre and a dark gray colour.

URANOG'RAPHY, Ast., Gr., Ουρανος (*Ouranos*), the Heavens, and γραφω (*graphō*), to write. A description of the Heavens.

UR'CEOLATE, Mal., Lat., *urceus*, a water ewer. Inflated in the middle like a water ewer.

UROCERA'TA, Ent., Gr., ουρα (*oura*), a tail, and κερας (*keras*), a horn. A Tribe of hymenopterous Insects, so called because the ovipositor of the female consists of a very long, complicated, horn-like borer or terebra.

UROP'TERANS, Crust., Gr., ουρα (*oura*), a tail, and πτερον (*pteron*), a wing. A Family of amphipodous Crustacea, so called because the tail (abdomen), is terminated by wing-like or expanded appendages, acting as fins.

URTICA'CEÆ, Bot., Lat., *Urtica*, the Nettle. A natural Order of Plants. It contains more valuable plants than the Nettle, such as the *Bread-fruit*, *Mulberry*, *Fig*, *Hemp*, *Hop*, &c.

U'TRICLE, Bot., Lat., *utriculus*, a little bottle like a sheath. A Caryopsis which does not adhere to the seed.

U'VEA, Anat., Lat., *uva*, a grape. A term applied to the Pigment on the posterior surface of the iris, so called from its colour.

U'VULA, Anat., Lat., dimin., of *uva*, a grape. A somewhat conoidal Process of the Velum palati, or soft palate.

VALERIANA'CEÆ, Bot., Lat., *Valeriana*, the Valerian. A natural Order of Plants.

VALVE, Nat. Ph., Anat., &c., Lat., *valvæ*, folding doors. In Anatomy, applied to folds of the lining membrane of various cavities, and that close openings.

VAL'VULÆ, Anat., see *Valve*, of which it is a diminutive. A term applied to circular folds of the mucous membrane of the intestines, the *Valvulæ conniventes*.

VANA'DIUM, Chem., from *Vanadis*, a Scandinavian Deity. One of the rarest of all elements. It is obtained from the iron ore of Taberg in Sweden.

VARI'ETY, Nat. Hist., Lat., *variare*, to differ. An accidental subdivision of a species.

VA'SA, Anat., Lat., *vas*, a vase, or vessel. The *Vasa vasorum*, or the vessels of the vessels, are minute blood-vessels that serve to nourish the larger ones.

VAS'TUS, Anat., Lat., *vastus*, vast. A term applied to two large fleshy Muscles of the femur—the *V. externus*, and *V. internus*.

VEC'TOR, or **RA'DIUS VEC'TOR**, Ast., Lat., *vehere*, to carry. A straight line supposed to be drawn from the centre of a planet to the centre of the Sun, by which line the planet appears to be carried round the Sun in its orbit.

VEIN, Anat., Lat., *vena*, a vein. A blood-vessel that conveys blood *to* the heart.

VEIN'LET, Bot., see *vein*, of which it is a diminutive. Applied to the Vessels (improperly called nerves, or nervures) of leaves. Those on the upper surface convey the sap into the leaf; those on the under one, the elaborated juice into the bark.

VE'LUM, Anat., Lat., *velum*, a veil. The *Velum palati* is a muscular septum attached to the posterior extremity of the palatine arch—the *Soft palate*.

VENA'TION, Bot., see *Vein*. The manner in which the veins are distributed through a leaf.

VE'NOUS, Phys., see *Vein*. Relating to the veins, as *venous blood*, &c.

VENTRICO'SE, Bot., Lat., *ventricosus*, swollen. Inflated.

VEN'TRICLE, Anat., Lat., *ventriculus*, a little cavity. A name given to various Cavities, as to two of those found in the *heart*, those of the *brain*, *larynx*, &c.

VENTRIC'ULUS, Orn., see *Ventricle*. The gizzard, or third stomach of certain birds.

VERBENA'CEÆ, Bot., Lat., *Verbena*, the Vervain. A natural Order of Plants.

VERNA'TION, Bot., Lat., *vernare*, to grow green again. A term applied to the manner in which leaves are packed in the bud.

VERRUCO'SE, Nat. Hist., Lat., *verruca*, a wart. Applied to any surface studded with wart-like knobs.

VER'TEBRÆ, Anat., Lat., *vertere*, to turn. A name given to the twenty-eight or twenty-nine Bones composing the spinal column ; so called because (with one exception, the sacrum) they all have more or less motion on each other.

VER'TEBRAL, Anat., see *Vertebræ*. Relating to the Vertebræ.

VERTEBRA'TA, Zool., see *Vertebræ*. Animals furnished with vertebræ, and consequently with other osseous parts forming a skeleton, composing the first (vertebrated) of the four great plans or forms of structure exhibited by animals.

VER'TEX, Anat., Lat., *vertex*, the top of the head.

VER'TICIL, Bot., Lat., *vertere*, to turn. Synonymous with whorl, a term expressive of the position of leaves when more than a single pair spring from the same node and form a circle round the stem.

VERTIC'ILLATE, Bot., Lat., see *Verticil*. Disposed in a verticil.

VESIC'ULAR, Bot., Lat., *vesicula*, a vesicle. Like a vesicle or bladder.

VESPERTILION'IDÆ, Mam., Lat., *Vespertilio*, a Bat. A Family of cheiropterous Mammalia, of which the Bat is the type.

VES'TIBULE, Anat., Lat., *vestibulum*, a vestibule. An irregular Cavity of the labyrinth or internal Ear; so called because the various other parts communicate with it.

VEXIL'LUM, Bot., Lat., *vexillum*, a standard, colours. The upper Petal of an unequal corolla, which is raised like a standard above the others.

VIBRA'TION, Ac., Lat., *vibrare*, to quiver. A tremulous motion, which, in sonorous bodies, produces undulations which, impressed on the nerve of the ear and appreciated by the brain, produce the sensation we call hearing.

VIBRIS'SÆ, Orn., &c., Lat., *vibrissæ*, hairs. The long, stiff hairs about the mouth of birds. The same term is applied to the stiff, bristle-like hairs which are found about the lip of quadrupeds, like a moustache, as in the Cats.

VIBRION'IDÆ, Zool., Lat., *vibrio*, a genus so called from *vibro*, I vibrate. A Tribe of Animalcula well known as microscopic Eels. One species is parasitical on wheat. M. Bauer has calculated that a single grain of wheat may contain 50,000.

VIL'LI, Anat., Lat., *villus*, a hair. Minute elevations on the surface of the villous membrane (whence the name of the latter) of the alimentary canal, composed of blood-vessels, nerves, and absorbents, resembling the down on a Peach.

VIL'LOUS, Bot., see *Villi*. Covered with minute hairs.

VIOLA'CEÆ, Bot., Lat., *Viola*, the Violet. A natural Order of Plants.

VIS'CUS, Anat., Lat., *viscus*, or *viscera*, entrails. A term applied to all the Organs of the digestive system.

VITA'CEÆ, Bot., Lat., *Vitis*, the Grape. A natural Order of Plants.

VI'TAL, Phys., Lat., *vita*, life. That which is essential to life, thus the Brain, Lungs, &c., are vital organs—the arms, &c., are not.

VITAL'ITY, Phys., see *Vital*. As commonly used, this word simply implies vital action. It also expresses that mysterious principle, of which we know nothing, called Life.

VIT'ELLINE, Anat., Lat., *vitellus*, the yolk of egg. The yolk of egg, or any fluid closely resembling it.

VIT'REOUS, Anat., Lat., *vitreus*, clear, transparent, glassy, from *vitrum*, glass. A term applied to the inner table of the walls of the Cranium and to the posterior of the three Lenses of the Eye—the *Vitreous humour*.

VOLCA'NO, Geol., It., *Vulcano* (from Vulcan), an igneous eruption from the crust of the Earth, usually called a burning mountain.

VOLTAM'ETER, Nat. Ph., It., *Volta*, and Gr., μετρον (*metron*), a measure. An instrument invented by Farraday which acts as a comparative standard of the effect of voltaic electricity, or as a positive measure of the electricity.

VOL'UBLE, Bot., Lat., *volubilis*, turning. Twining.

VOLU'TES, Mal., *volutus*, rolled. The Turnings or Wreaths of Univalves.

VOL'VA, Bot., Lat., *volva*, an envelop. The involucrum-like base of the stipes of the *Agaricus* or Fungi.

VO'MER, Anat., Lat., *vomer*, a ploughshare. A thin, flat Bone forming part of the septum narium, or partition between the nostrils.

VORTICEL'LA, Rad., Lat., *vortex*, a whirlpool. The generic name of the Wheel-animalcula. See *Rotifera*.

VUL'PINITE, Min., It., *Vulpino*, a place, so called, near Bergamo, in Italy. A Mineral consisting of sulphate of lime and some silica; it is the Bargiglio marble, of which so many vases, &c., recently imported into this country, are made.

WACKE, Min., Ger., *wacké*, rock. A modification of Trap, having an argillaceous aspect, resembling hardened clay.

WANT, Phys., Sax., ƿana, to be without something necessary. An internal Sensation, such as hunger, thirst, &c., arising from the demands of the organs for a supply of their formative principles. Any instinctive desire, or internal physical impulse, such as to breathe, &c.

WA'VELLITE, Min., Dr. *Wavel*, after whom it was named. A mineral sometimes called *Hydrargilite.* It is a hydrated phosphate of alumina.

WELL, ARTE'SIAN, Nat. Ph., Sax., ƿelle, a fountain, and Fr., *Artois*, a province of France. A vertical perforation in the Earth, of small diameter, but frequently of great depth, through which abundant supplies of water are obtained frequently in elevated jets. Although much attention has been paid to the construction of these siphon-like wells in Artois, (whence Artesian,) they are by no means of modern invention—they were well known to the ancients.

WER'NERITE, Min., after *Werner*, the celebrated geologist. A Mineral of a greenish or grayish colour found in Sweden and Norway.

WINGS, Nat. Hist., Dan., *winge*, a wing. Applied by analogy to any projecting and flattened part of an organ, as to that of the seeds called "winged," which serves to disseminate them. See *Ala.*

WHORL, Bot., Mal., see *Verticel.* In Botany, this word is synonymous with Verticel; as applied to a *shell*, it means one of the *Turns of the spire.*

WOL'LASTONITE, Min., after Dr. *Wollaston.* A Mineral so called—a species of prismatic Augite.

WOOD, Bot., Dut., *woud*, woods, or wood. The solid substance composing the trunk and branches of trees, consisting of the *Alburnum* and *Duramen*, q. v. *Woody fibre* consists of slender, transparent, membranous tubes, tapering acutely at each end, lying in bundles in the tissue of plants. They do not intercommunicate.

WORMIA'NA, Anat., from *Wormius*, an anatomist, who was (erroneously) supposed to have been the first to describe the bones so called. See *Triquetra.*

XAN'THIC, Chem., Gr., ξανθος (*xanthos*), yellow. An Acid so called, the compounds of which are generally yellow, whence its name.

XE'NOS, Ent., Gr., ξενος (*xenos*), a guest. One of the two singular genera composing the Rhipiptera, q. v., and so called because the only two species known are developed between the abdominal scales of the Wasp. See *Stylops*, the remaining genus of the order.

XIPH'OID, Anat., Gr., ξιφος (*xiphos*), a sword, and ειδος (*eidos*), shape. The ensiform Cartilage of the sternum.

XIPHORHYNCH'OUS, Icth., Gr., ξιφος (*xiphos*), a sword, and ρυγχος (*rugchos*), a beak. A term applied to a Family of acanthopterygious Fishes, of which the snout is prolonged into a powerful instrument of defence, as in the Xiphias, or *Sword-Fish.*

XIPHOSU'RA, Crust., Gr., ξιφος (*xiphos*), a sword, and ουρα (*oura*), a tail. A Tribe of Crustacea, so called because they are furnished with a long, horny, sword-shaped appendage resembling a tail.

XYLOPH'AGA, Ent., Gr., ξυλον (*xulon*), wood, and φαγω (*phagō*), I eat. A Tribe of coleopterous Insects, so called because their larvæ devour the wood of the trees in which they are developed.

XYLOPH'AGOUS, Ent., Gr., ξυλον (*xulon*), wood, and φαγω (*phagō*), to devour. Applied to the second Family of the Coleoptera, so called because nearly all the insects which compose it live in wood, which their larvæ bore and channel in all directions.

XYRIDA'CEÆ, Bot., Lat., *Xyris*, the wild Iris. A natural Order of Plants.

YE'NITE, Min., from *Jena.* A Mineral so called by Lelièvre, because he discovered it about the time of the battle of Jena. A ferruginous silicate of lime found in Elba.

YT'TRIA, Min., Sw., *Ytterby*, a place so called in Sweden. An Earth, the metallic base of which is Yttrium.

YT'TRIUM, Chem., from *Ytterby*, in Sweden, because it was first found in a mineral (Gadolinite) at that place. A metal discovered by Gadolin in the mineral that now bears his name.

YTTROTAN'TALITE, Min., same etym. A mineral consisting of Yttria and oxide of columbium.

ZE'NITH, Ast., Ar., سنح (*seneh*), the head, or top of the head; or سني (*seni*), high. The point in the heavens directly over head, and opposite to the *Nadir*, or point under foot.

ZE'OLITES, Min., ζεω (*zeō*), I boil, and λιθος (*lithos*), stone. A group of Minerals, which, when subjected to the blowpipe, melt with considerable ebullition.

ZE'RO, Nat. Ph., &c., It., *zéro*, a cipher, nought. A word equivalent to 0, and, as such, employed by the French mathematicians; but, in England and in this country, usually restricted to the starting point of the thermometric scale. The zero of Reaumur is the freezing point of water; that of Fahrenheit thirty-two degrees below its congealing point.

ZOAN'THUS, Rad., Gr., ζωον (*zōon*), animal, and ανθος (*anthos*), flower. That species of *Actinia*, q. v., which, having the tentacula coloured like the petals of a flower, has received the above name, and the vulgar one of *Sea-Anemone.*

ZO'DIAC, Ast., Gr., ζωδιακος (*zōdiakos*), from ζωον (*zōon*), an animal. An imaginary belt in a circle apparently surrounding the heavens. It is so called because its twelve equal divisions (with one exception ♎, Libra, the Balance) are marked by the names and figures of animals.

ZO'NAL, Min., ζωνη (*zōne*), a girdle. Applied to a Crystal surrounded with facets that form a sort of belt.

ZOOG'LYPHITE, Geol., Gr., ζωον (*zōon*), animal, and γλυφω (*gluphō*), to engrave. A stone bearing the impress of animals.

ZOOG'RAPHY, Nat. Hist., Gr., ζωον (*zōon*), an animal, and γραφω (*graphō*), I write. Synonymous with Zoology.

ZO'OLITE, Geol., Gr., ζωον (*zōon*), an animal, and λιθος (*lithos*), stone. A petrified animal.

ZOOL'OGY, Nat. Hist., Gr., ζωον (*zōon*), an animal, and λογος (*logos*), a treatise. That branch of Nat. Hist. which treats of animals.

ZOOMORPH'OUS, Nat. Hist., Gr., ζωον (*zōon*), an animal, and μορφη (*morphe*), form. A term usually applied to Minerals. Any thing having some resemblance in form to any animal.

ZOONO'MIA, Phys., Gr., ζωον (*zōon*), an animal, and νομος (*nomos*), law. Animal Physiology.

ZOON'OMY, Zool., Gr., ζωον (*zōon*), animal, and νομος (*nomos*), law. That branch of Zoology which treats of the laws which govern animal bodies.

ZO'OPHYTE, Rad., Gr., ζωον (*zōon*), an animal, and φυτον (*phuton*), a plant. A name formerly given to the coralliferous Radiata; so called by the ancients because they supposed them to be stony plants, an idea which was not exploded until Trembley, in 1740, clearly proved their animal nature.

ZOOPHYT'OLITE, Nat. Hist., Gr., ζωοφυτον (*zōophuton*), zoophyte, and λιθος (*lithos*), a stone. Applied to Corals resembling shrubs.

ZOOT'OMY, Nat. Hist., Gr., ζωον (*zōon*), an animal, and τεμνω (*temnō*), I dissect. Comparative Anatomy.

ZOOTYP'OLITE, Nat. Hist., Gr., ζωον (*zōon*), an animal, and τυπος (*tupos*), form. A stone impressed by some extinct animal, or its parts.

ZU'MIC, Chem., Gr., ζυμη (*zume*), leaven. An Acid so called, a compound formed in vegetable matters which have undergone the acetous fermentation.

ZUMOL'OGY, Chem., Gr., ζυμη (*zume*), leaven, and λογος (*logos*), treatise. That branch of Chemistry which treats more specially of fermentation.

ZUMOM'ETER, Chem., Gr., ζυμη (*zume*), leaven, and μετρον (*metron*), measure. An instrument for determining the degree of fermentation in liquids.

ZUMOSIM'ETER, Chem., Gr., ζυμωσις (*zumōsis*), fermentation, and μετρον (*metron*), measure. An Instrument for measuring degrees of fermentation. Synonymous with *Zumometer*, q. v.

ZU'MOTECHNY, Chem., see *Zumology*, with which it is synonymous.

ZYGÆ'NA, Icth., Gr., ζυγαινα (*zugaina*), a fish so called by Aristotle. The most singular genus of all chondropterygious Fishes, consisting of Sharks with a head resembling a double-headed hammer, the neck (?) forming the handle.

ZYGODAC'TYLES, Orn., Gr., ζυγον (*zugon*), a yoke, and δακτυλος (*daktulos*), a finger or toe. An Order of Birds so called by Temminck, corresponding with, but superseded by, the *Scansoria*, q. v., of Cuvier.

ZYGOMAT'IC, Anat., Gr., ζευγνυω (*zeugnuō*), to join, or bring together. A term applied to a Process of the temporal and malar Bones; also to an arch formed by their junction. It is also applied to two of the Muscles of the face, and to the Suture which joins the two processes.

THE END.

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Professors of Mathematics and Boards for the examination of Midshipmen are charged with the execution of this order. (Signed) J. Y. MASON.

The above named work has also been adopted as a text-book in the Central Public High School of Philadelphia, the High School of Baltimore, &c.

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The work is used as a text-book in the University of Pennsylvania, Wesleyan University, Union College, Central High School of Philadelphia, &c.

From Professor A. D. Bache, LL. D., Superintendent of U. S. Coast Survey.

The undersigned having used the second edition of Gummere's Astronomy as a text-book in the University of Pennsylvania for several years, and the third edition for a year, when last connected with the University, has had a good opportunity to judge of its merits, and recommends it strongly for its clear style and perspicuous arrangement. The Appendix to the third edition contains matter of the highest interest to the practical astronomer as well as to the student.

A. D. BACHE, *Late Prof. of Nat. Philos. Univer. of Pa.*

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From Professor J. S. Hart, Principal of the Philadelphia Central High School.

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PHILADELPHIA, June 15, 1847.

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